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PRESENTATION

Operator

Good morning, and thank you for standing by. Welcome to the Second Quarter 2023 Gogo Inc. Earnings Conference Call. (Operator Instructions) Please be advised that today's conference is being recorded.

I would now like to hand the conference over to your speaker today, Will Davis, Vice President of Investor Relations. Please go ahead.

William G. Davis - *Gogo Inc. - VP of IR*

Thank you, Catherine, and good morning, everyone. Welcome to Gogo's second quarter 2023 earnings conference call. Joining me today to talk about our results are Oakleigh Thorne, Chairman and CEO; and Jessi Betjemann, Executive Vice President and CFO.

Before we get started, I would like to take this opportunity to remind you that during the course of this call, we may make forward-looking statements regarding future events and the future performance of the company. We caution you to consider the risk factors that could cause actual results to differ materially from those in the forward-looking statements on the conference call.

Those risk factors are described in our earnings release filed this morning and are more fully detailed under Risk Factors in our Annual Report on Form 10-K and 10-Q, and other documents that we have filed with the SEC. In addition, please note that the date of this conference call is August 7, 2023. Any forward-looking statements that we make today are based on assumptions as of this date.

We undertake no obligation to update these statements as a result of more information or future events. During the call, we will present both GAAP and non-GAAP financial measures. We've included a reconciliation and explanation of adjustments and other considerations of our non-GAAP measures to the most comparable GAAP measures in our second-quarter earnings release.

This call is being broadcast on the Internet and available on the Investor Relations website at ir.gogoair.com. The earnings press release is also available on the website. After management comments, we'll host a Q&A session with the financial community only.

It is now my great pleasure to turn the call over to Oakleigh.

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Thanks, Will, and welcome to our Q2 2023 earnings call. Though Gogo executed well in Q2, the results were not up to our own high expectations. On the positive side, we achieved strong new activations, the AVANCE platform now accounts for more than 50% of our installed base, and we hit some key milestones on our strategic objectives, such as our LEO global broadband product now dubbed Gogo Galileo.

On the flip side, we suffered unusually high suspensions, which we'll cover in detail in a moment, and we suffered a further delay in delivery of our 5G chip, both of which have caused us to take down guidance for the year and in our long-term model. But our few headwinds do not change our view, that Gogo is poised for explosive growth in 2025 and beyond. We serve a highly unpenetrated market with 78% of the world's business aircraft flying without a broadband solution today. We see unprecedented demand with a surge of travelers choosing to fly private aviation post-COVID, and those travelers demanding connectivity. We have an attractive business model based on recurring service revenue that drives strong cash flow.

We are incorporating new technologies into our platform to deliver orders of magnitude improvements in service to dramatically increase our total addressable market, and to enhance our competitive position. And we have a strong balance sheet that enables us to make the investments necessary to deliver those new technologies. The price for reaching that explosive growth and driving substantial returns for shareholders is the 2-year investment cycle we're now in, to build Gogo 5G, develop Gogo Galileo and execute the FCC rip and replace project, all of which I will deep dive in a few minutes.

This morning, I'm going to start by getting deep into the data for the quarter to demonstrate that many of the headwinds we faced this year are temporary in nature. Then I'll update you on our strategic initiatives, and finally, I'll spend a moment on the competitive context in which we're executing those initiatives. I'll then turn it over to Jessi to dive into the numbers and the rationale behind our guidance update.

So let me start with demand. In the quarter, we saw a little rebound in demand as measured by flight counts. Gogo-equipped aircraft flew 5% fewer flights than in Q2 2022, but the gap to Q2 2022 actually narrowed each month, from minus 7% in April to minus 4% in May and minus 3% in June. And frankly, I guess that small could be explained by the number of aircraft currently caught in maintenance traps at dealers, which I'll touch on in more detail when I discuss suspensions in a moment. More importantly, we continue to see strong growth from post -- pre-COVID 2019 flight counts with Q2 up 30% from Q2Â 2019, indicating that we've reached a new sustainable plateau of flight demand.

That thinking supported by the latest annual survey of private air passengers from Doug Gollan's Private Jet Card Comparisons, where 92.3% of those who started private travel during COVID said that they plan to continue flying privately in the future. Meanwhile, usage per flight hour surged 20% over Q2 2022 and up 67% from 2019, indicating the demand for WiFi in aircraft continues to grow.

Now I'll turn to drivers of our high-margin recurring service revenue, average revenue per aircraft, ARPA, and aircraft online, AOL. Service revenue for the quarter set a record and was up 8% over Q2 2022, the growth slowed from Q1 as suspensions weighed down AOL. ARPA for the quarter was relatively flat as continuing strong planned upgrades were offset by a shift in product mix as more new AVANCE L3s came online than L5s. As for AOL, we're having a record year for activations, but sadly, we're also having a record year for suspensions that we feel are putting temporary downward pressure on AOL. More on that in a moment.

On the activation front, driving AVANCE activations is our primary strategic objective, because it enables customers to easily upgrade to new networks and technologies with Gogo as opposed to spending more money and spending more time in the shop installing competitive systems. This should manifest itself in extended customer lifetimes and more high-margin recurring service revenue for Gogo. We had 229 new activations in Q2, our second-best quarter ever, up 13% from Q2 2022 and up 10% from Q1 2023. We're projecting a record 950-plus new activations for the year, up more than 15% from 2022 and a 20% jump in AVANCE units online.

We're also really pleased that in Q2, for the first time, AVANCE units online exceeded 50% of our total ATG units online, further adding stability to our service revenue portfolio. All that said, we feel that growth in new activations has slowed modestly as customers wait to see how Gogo 5G and Galileo perform, and see what potential competitors may offer in terms of product and customer support.

Now for the bad news. Growth in suspensions and deactivations, which we believe is a temporary issue. For purposes of clarity in this conversation, I'm going to lump transactions that are considered de-activations and reactivations in our customer management system and some that are considered suspensions into 1 category called suspensions, because they are all temporary in nature.

To be clear, these transactions include maintenance events, about 40% of the time; aircraft sold, about 30% of the time; and change of management company, about 20% of the time. Q2 was our highest suspension quarter ever, up 31% from Q2 2022 driven by 33% increase in maintenance suspensions, and a 41% increase in management changes. Not only are there more aircraft being suspended, the suspensions are lasting longer especially maintenance.

For example in January 2022 around 45% of suspensions ended in less than 30 days. In June of this year that was down to 34%. The primary driver of the volume and duration of suspensions appears to be a logjam for engine maintenance. And many aircraft have been flown hard the last few years and cannot fly passengers again until they get a major C check, which usually involves taking the entire engine apart, replacing worn parts. rebuilding it and then testing it in a wind tunnel.

Last week, we asked one of our largest dealers, how soon we could book a C check? The answer, Q2 2024. Why? Because of high demand part shortages, and labor shortages. Another example of this logjam is replacement engines. In normal times, when dealers remove the engines to work on them. They often install temporary replacement engines, so that the customer can continue flying for the duration of the work. We're hearing many reports that there are literally no replacement engines to be had, which is leading to scores of aircraft sitting in tarmacs with no engines. This perfect storm is leaving aircraft stranded on tarmacs across the country. Needless to say, when the aircraft stuck on the ground, the customer usually decides they don't need to pay for Internet.

The good news is that, once they get done in the shop or complete their management change or have a new owner, those aircraft are coming back online. Since January of 2022, 93% of all suspensions returned within 210 days. So the return rate is very good. We further confirm the suspension trends, I just noted by reaching out to 197 tails that were suspended for more than 45 days in Q2. 66% of those tails responded with 64% of respondents stating that they were still stuck in maintenance, 15% still owed us money, 6% have returned to service and 8% have been sold. The rest were scrapped returned to a leasing agent.

What is very important to note is that none had gone to a competitor. As we analyze this phenomenon, we believe that suspensions were unusually low in '21 and '22 and are unusually high now. And when those conditions normalize, we should see a return of roughly 200 aircraft into the active aircraft online pool.

Now let me turn to shipments and field inventory. Inventory in the field actually grew by about 30 units in the quarter to roughly 900. But the good news is that the percentage of field inventory committed to a customer rose from 79% last quarter to 85% this quarter, which creates a nice tailwind for us. Roughly 130 units in the field are uncommitted, 2/3 of which are our dealers that regularly hold inventory and sell a lot of systems and where we see little risk. Roughly 1/3 are at smaller dealers that ordered a system during the COVID supply chain crisis in order to have inventory in case a customer came in wanting an install. And there, there may be some risk of not having an install anytime soon.

One other note, we include installed, but not yet activated equipment in our inventory count. This generally occurs at the OEMs where we are standard line fit. And a particular customer does not want ATG connectivity, either because they don't fly in North America or don't care for connectivity. This installed equipment accounts for about 20% of the inventory account I mentioned a moment ago. The good news is that if those aircraft are ready for activation by a new owner or if the current customer decides they want the Internet after all.

So now, let me focus on shipments and equipment revenue. Though behind 2023 plan, we had a nice pickup in Q2 with 277 units shipped, up 24% from Q1, generating a 20% increase in equipment revenue. We expect to ship over 1,000 units for the year which would look good on a historical trend line basis, but pales compared to the blow-out 1,334 units we shipped last year. Given our slow start in 2023, we're being cautious about Q3 and Q4 projections, though we think we may see some uplift from our recent LX5 announcement.

Now let me turn to an update on our strategic initiatives, and how we intend to accelerate growth with our 3-pronged strategy. First, we want to expand our services' addressable market by broadening the AVANCE platform product offering and adding networks to meet the needs of each segment of the BA market globally.

Second, we want to drive customer loyalty, by continually improving our networks and leveraging the AVANCE platform to provide easy upgrade paths as new technologies and networks emerge. And third, we're focused on offering the best product and customer support for each segment of the market at the lowest total cost of ownership. We're making great strides in our strategic initiatives to achieve those goals, including, our FCC replacement program, our 5G network and our GBB LEO offering.

I'll start with the FCC. You'll recall that last year, Gogo was awarded a $334 million grant under the FCC Secure and Trusted Communications Networks program to reimburse it for expenses associated with accelerating the removal of Chinese telecom technology from our 3G and 4G networks. Because there were more qualified grants than originally planned, all grants were cut back to 39% of the original reward, which in Gogo's case is a cut back to $132 million.

At this point, we and most other grant recipients are waiting to see if Congress will fully fund the program as part of its reauthorization of FCC auction authority, which is expected this autumn. Because the functionality of replacement ground-based equipment will be better than the equipment installed in our 3G and 4G networks today, Gogo will get some significant benefits from this network refresh, including a 40% improvement in connectivity performance for AVANCE L3 customers, and in almost doubling of the number of aircraft the ATG network can manage simultaneously.

In the meantime, we started working in the program and received a small reimbursement of federal funds for doing so. On the customer side of this transaction, our goal is to convert all of the 3,400 tails flying with our Classic product line to new LRUs with LTE air cards over the next few years. We've been in touch with almost all of those customers and have actually spoken to more than 75% of them. And of those that already have a preference, the overwhelming majority are leading towards an AVANCE upgrade.

Up until now, we created this program as an overlay to our long-term model and excluded it from our financial guidance, except to say that it will be a drain on working capital later this year as we build inventory. Jessi will provide more detail on this program in a few minutes and this quarter, we'll begin incorporating the cost and reimbursements into our guidance. Though we must warn you that the exact timing of reimbursements could be very difficult to predict.

Now let me turn to the most disappointing news of the year, the second delay of our 5G chip. Let me start by describing the issue. First, our supplier of 5G airborne and ground station radio technology is Airspan. They in turn have a chip supplier, GCT, one of the few firms focused on developing 5G chips. They in turn use Samsung to fabricate those chips and Samsung designates a sub design house to develop the more standard blocks of the chip outside the 5G and 4G blocks designed by GCT. As the chip was being brought up after fabrication by Samsung, there were 3 issues identified in the system block of the chip. A detailed root cause analysis was conducted by GCT and it ascertained that all 3 issues were related to the same root cause; a software issue in the peripheral sub block of the chip, not an issue in the 5G block.

GCT is still working on the exact action plan to fix the chip, but has made us aware of all the options they are considering, all of which point to a mid-year 2024 release of our 5G product, plus or minus a month or 2. While this is very disappointing, one has to understand that 5G chips are difficult to design and build. Because of the dramatic increases in speeds and densification of transistors on the chip surface to enable those speeds. The benefit to us of this technology is that it will enable us to deliver ATG speeds 5 to 10x faster than our current speeds, at around 25 megabits per second mean and 75 to 80 megabits per second peak, much faster than any potential ATG competitor but the con is that we have borne some technology risk in doing so.

Meanwhile, we're making great progress with OEMs and at dealers and certifying the equipment we can certify today and then selling pre-provisioning kits to customers. On the good news front, we're excited to announce our new LX5, LRU to support 5G last week. Up until now if a new customer wanted to install our 5G product they would have to install 2 line replaceable units or boxes inside the aircraft and add two 13-inch antennas. The LX5 cuts that install down to 1 LRU plus the intense. And because the LX5 with the same form factor as our current popular L5 LRU, this dramatically simplifies upgrades for our 2,300 AVANCE L5 customers. They can swap out their current antennas for MB13s that go into the same location as the old antennas and then pull out the L5 and install the LX5 in the exact same space with the exact same cabling and harnesses as the old LRU.

And finally, because our MB13s, it can operate on our 4G as well as our 5G network and AVANCE L5 customer can pre-provision MB13 antennas today and only have to swap the LX5 box for the L5 box to upgrade when our chip is ready. To encourage pre-provisioning and drive 5G adoption, if a customer installs L5 and MB13 this year, we'll ship them in LX5 box to swap for free next year.

And finally, because the LX5 is 1 box not 2, it's considerably cheaper than the previous 2-box 5G configuration. This is part of the Gogo now-and-next strategy and a great example of our AVANCE platform enabling easy upgrades to new networks and technologies. We're excited to bring Gogo 5G to market and believe it's the perfect product for mid-sized jets on down that fly North American missions that want great speed at a better value than competitive satellite products.

Now I will turn to our LEO-based global broadband initiative, which we've now branded Galileo. Galileo adds an electronically steerable antenna to the AVANCE platform and adds the OneWeb low Earth orbit satellite constellation to our network offerings. LEOs are particularly well suited to business aviation, because their low altitude enables an equivalent link budget with less power than with GEO satellites, thereby enabling global coverage with a smaller antenna that can fit in almost all business aircraft.

Last year, we announced our Galileo HDX terminal, a small antenna that fits on almost all business aircraft and targets mid-size and smaller jets that, A, are domiciled outside North America and have no broadband solutions today; and B, are domiciled inside North America and often fly international missions. The exciting news in Q2 with the introduction of the Galileo FDX terminal. A larger antenna that delivers significantly higher bandwidth and targets super mid-size and larger jets that fly global missions. We demonstrated a prototype of FDX at EBACE, the big business aviation show in Geneva, where it delivered a solid 109 and 200 megabits per second link up to the plane and 30 megabits per second on the return. Even more exciting is that those speeds will increase dramatically when OneWeb launches its Gen 2 network in just a few years.

Our goals for the Galileo family all drive incremental growth for Gogo. They are to expand our total addressable market to include the 14,000 business aircraft registered outside of North America; to add a global satellite feature for the 1000s of U.S. super mid and heavy jets that already have our ATG products today; and third, to drive enhanced stickiness in our core North American medium-sized and smaller aircraft segments by offering an easy path to add a LEO product, if they desire more capacity.

A huge advantage of ours is that Galileo is a simple upgrade from any AVANCE-installed aircraft. One only needs to add either our HDX or FDX antenna on the fuselage and then run data and power cabling into the aircraft. This is another great example of our AVANCE platform, making it easy for customers to upgrade from 1 AVANCE plan product to another, and why expanding AVANCE penetration is a cornerstone of our strategy.

Our satellite partner, OneWeb, has completed its 648 satellite Gen 1 constellation and is well on its way to completing its ground networks before we launch HDX. And we remain on track with Hughes, our antenna partner to deliver HDX in the second half of 2024 and FDX in the first half of 2025. We've received a very enthusiastic response to Galileo from our customers and have already signed a line-fit agreement with 1 OEM, and have discussions underway with several others.

We feel that these strategic enhancements to the AVANCE platform position us very well in our competitive environment. Most of our traditional GEO satellite competitors, who can only serve large jets, because of the size of their antennas, have doubled down on GEO connectivity and have no answer to the dramatic performance improvements LEO and 5G technology will provide to the business aviation market.

Our one potential LEO satellite competitor seems to be focused mostly in other much larger markets that, require far less customer support than business aviation. And finally, our old potential ATG competitor has been offering demo flights on which their system performs better than our Classic ATG offerings, but nowhere close to what Gogo 5G will offer. And I would suggest they face a daunting task financing a business that will take hundreds of millions in capital to have a chance of making a profit in a market where they face a profitable competitor with a superior product and customer service.

So it's disappointing to take down guidance, but I'd like to end on a positive note, which is that we have a lot of tailwinds that should drive performance in the future, including great product launches that should drive TAM, extend customer normalize times, and drive high margin service revenue. We have reduced investments after that, that should drive free cash flow and we should have increased aircraft online as suspension levels normalize and the 86% of named inventory out in the field gets installed and/or activated.

I want to thank -- I want to end by thanking the frontline Gogo team for the great work they've done, delivering great service and support to Gogo customers, innovating, developing, building, and shipping new products; managing our networks and datacenters; and working with our customers and distribution partners in the field. I also want to thank all the Gogo team that supports that frontline team and keeps us on the rails in finance, legal and people experience.

And with that, I'll turn it over to Jessi for the numbers.

Jessica Betjemann - *Gogo Inc. - Executive VP & CFO*

Thanks, Oak, and good morning, everyone. Gogo's second quarter performance continued to demonstrate strong demand for our services and products, and a robust market position. While we delivered solid financial performance in the quarter, especially at the bottom line, even as we undertake significant strategic investments such as Gogo 5G and Gogo Galileo, it was below our expectations for certain operational metrics on topline performance.

In my remarks today, I'll start by walking through Gogo's second quarter financial performance, then I will turn to our balance sheet and capital allocation priorities. Next, I will provide an overview of the financial impact for the FCC program, and I'll finish up with an update and additional context on our revised 2023 guidance and long-term targets. Total revenue for the second quarter was $103.2 million, up 6% over the prior year and up 5% sequentially. Gogo delivered record service revenue of $79.1 million in the second quarter, an 8% increase year-over-year and a 1% increase sequentially.

Our ATG aircraft online reached 7,064 units as of the end of the second quarter, up 6% versus the prior year and up slightly sequentially. AVANCE units online grew to 3,598 and now comprises 51% of our total fleet, and generates 52% of our ATG service revenue. Exceeding over 50% is an important milestone in the evolution of the business.

We had 229 new activations this quarter, which is a record for second quarter activations. However, this was offset by an increase in temporary suspensions for AVANCE and Classic ATG units due to the maintenance cycle and other dynamics, Oak discussed, which caused incremental units online to be muted in the second quarter. Additional aircraft online is the key driver of service revenue growth and in our view, value creation for the business.

We expect AVANCE aircraft online growth rate to accelerate over the next several quarters due to progress on 3 factors: First, dealers addressing staffing challenges that are currently contributing to slower installation rates, which will result in more of the equipment shipped to be brought online; second, maintenance events starting to return to normal levels, reducing suspension time; and third, second-hand aircraft inventory getting sold and reactivated.

ATG ARPA grew 1% year-over-year to $3,371 and decreased 1% from the prior quarter due to a higher product mix of the AVANCE L3 product. The launch of Gogo 5G and Galileo next year are catalysts to further expand our ARPA growth opportunity over time, partially offset by continued L3 sales into smaller aircraft which have similarly high service margins, but lower ARPA.

Moving to equipment, Gogo delivered $24.2 million in equipment revenue in the second quarter, a 2% decrease year-over-year and 20% increase sequentially due to AVANCE shipments. Gogo AVANCE shipments totaled 277 in the second quarter, down 11% year-over-year and up 24% sequentially, reflecting the changing dynamics of inventory in the channel and dealer demand that Oak discussed. We remain confident that our strong position in a global market that is only 22% penetrated with inflight connectivity, coupled with the launch of Gogo 5G and Galileo next year, will continue to propel our equipment sales in the future. Overall, we are expecting our 2023 topline performance to slightly increase in the second half of the year, driven by more activations and shipments.

Turning to profitability. Gogo delivered service margins of 79% in the second quarter. Service gross profit in the second quarter was up 9% year-over-year and was the main driver for the 7% year-over-year EBITDA growth. We continue to expect long-term service margins in the 75% range and to be the primary lever for free cash flow generation and long-term value creation.

Equipment margins in the second quarter increased 18 percentage points sequentially to 27%, in line with our expectations. The increase was driven by higher equipment revenue in the quarter with relatively fixed production costs and the $1.3 million in inventory write-off costs due to the FCC program that we incurred in the first quarter. Equipment costs in the second quarter include costs related to the FCC program, replacing a large number of EVDO air cards in AVANCE-equipped aircraft with dual modem air cards.

Equipment gross profit in the second quarter was up 236% sequentially and was the main driver for the 11% sequential EBITDA growth. Our planned level for equipment margins is in the 25% to 30% range this year. However, this can fluctuate over the next 2 quarters due to the expected FCC reimbursement accruals. I will discuss the financial implications of the FCC program in more detail in a little bit.

Moving on to operating expenses. Second quarter combined engineering design and development, sales and marketing, and general and administrative expenses of $30 million increased 3% year-over-year and 5% sequentially. This year-over-year increase include cost for Galileo, offset by lower personnel costs tied to a reduction in bonus expense. We continue to expect that 2023 and 2024 will be investment years, as we complete our 5G program and ramp spending for Galileo, causing 2024 to be the high-point year for these combined investments. Once completed, we expect to see the benefit of these investments through sustained strong topline growth and a ramp in free cash flow in our core operating business.

In terms of Gogo 5G, our approximately $7 million of 5G spending in the second quarter was comprised of $1 million in OpEx and $6 million in CapEx. As noted in our press release on July 27 and further described by Oak, due to a design error in a non-5G component of the 5G chip, the commercial launch of 5G is delayed until approximately mid-year 2024. We maintain our estimate of $100 million total cost for our 5G program, but the delays will push approximately $8 million of CapEx and $5 million of OpEx into 2024 and reduce $7 million in planned 5G revenue in 2023. We also expect this delay to dampen revenue, EBITDA and free cash flow in 2024. The impact of the timing shift for 5G and revenue and cost is reflected in our revised 2023 financial guidance.

Now onto our Galileo initiative. In the second quarter, Gogo incurred $2.5 million in operating expenses related to Galileo. We expect external development costs for Galileo to be less than $50 million in total. We expect Galileo costs to be $13 million in 2023 and approximately $30 million in 2024. Gogo Galileo will be asset-light with approximately 95% of external development cost and OpEx and we believe it will deliver an attractive return on investment. The spending profile is reflected in our 2023 adjusted EBITDA and free cash flow guidance.

Moving onto our bottom line, Gogo's second quarter adjusted EBITDA increased 7% year-over-year to $44.1 million as a result of improved service gross profit that I described earlier, and lower personnel costs tied to a reduction in bonus expense. Gogo delivered net income of $89.8 million in the second quarter, translating to $0.69 in basic earnings per share and $0.67 in diluted earnings per share, of which $0.48 related to an income tax benefit.

Our reported net income includes an income tax benefit of $63.8 million in the second quarter due to the partial release of the valuation allowance on our deferred tax assets related to the section 163(j) interest limitation carry-forwards. The remaining of the valuation allowance of $26 million is still required for deferred income tax assets related to certain state credits, foreign net operating losses, and capital losses.

Gogo's income before taxes increased 15% year-over-year to $26 million in the second quarter. As of December 31, 2022, Gogo had $562 million in federal net operating losses, $448 million in state net operating losses, and $292 million in section 163(j) interest limitation carry forward.

As a reminder, our financial statements reflect non-cash income tax expense as we continue to generate positive pre-tax income. Based on our substantial NOL position, we do not expect to pay meaningful cash taxes for an extended period, but we may pay a modest amount by the end of our 5-year planning horizon.

In addition, our Shareholder Rights Plan, that is designed to preserve NOLs, is set to expire in September and our Board of Directors has voted not to renew the plan as changes in the shareholder base over a 3-year period will lap. This will not affect our current NOI status.

In the second quarter, we generated $13.3 million in free cash flow, down $2.2 million compared to Q2, 2022 due to an increase in interest costs from higher interest rates and switching at our election to 1-month SOFR, resulting in 5 months of interest paid, partially offset by the interest cap benefit. Free cash flow was down $6.7 million sequentially due to the increase in interest costs and higher CapEx, partially offset by lower net working capital.

Now I will turn to a discussion of our balance sheet. We ended the quarter with $610.5 million in outstanding principal on our term loan and $97.2 million in cash and short-term investments with our $100 million revolver remaining undrawn. Gogo's net leverage was lowered slightly to 3.0 times, in line with our target range of 2.5 to 3.5 times.

As announced on May 1, Gogo made the strategic decision to pay down an aggregate principal amount of $100 million on our outstanding term loan debt facility. As previously mentioned, we have a hedge agreement in place and the first step down to $525 million occurred in July. Now approximately 86% of our loan is hedged until July 2024, when the next step down to $350 million occurs with an increase in strike rate from 0.75% to 1.25%.

Gross leverage at the end of the first quarter was 4.2 times, and it was reduced to 3.5 times at the end of the second quarter after the $100 million paydown. 2023 interest costs will be reduced by approximately $4.5 million based on the July forward SOFR curve and $3 million net of foregone interest income.

As a result of executing a more conservative financial policy with a lower leverage target and paydown of debt, Moody's upgraded our credit rating to B1 with a stable outlook in May, and S&P improved its credit outlook in June from B+ stable to B+ positive outlook. Another notable item in the second quarter was that we generated positive shareholder equity for the first time in the company's history of $9.2 million, primarily due to the release of the valuation allowance.

Our capital allocation priorities have not changed and are aligned with our strategic goals. As a reminder, Gogo's capital allocation priorities are the following: First, maintaining adequate liquidity; second, investing in strategic opportunities to drive competitive positioning and financial value, including 5G and Galileo; third, maintaining an appropriate level of leverage for the economic environment with a target net leverage ratio of 2.5 to 3.5x; and fourth, returning capital to shareholders as appropriate in the future.

With the $100 million paydown of debt in May, we are focused on building our surplus cash position over the next few quarters as we continue to generate positive free cash flow. However, we don't anticipate any major capital allocation decisions until 2024.

I would now like to provide a summary of the expected financial impacts of the partially funded FCC Secure and Trusted Communications Network reimbursement program from which Gogo expects to receive $132 million. We are waiting to see if Congress will approve full funding, which would significantly increase our total reimbursement value, as we were granted up to $334 million.

The company has recently retained external advisors to assist us in the reimbursement process. We submitted and received our first reimbursement claim in July that, triggered the start of the 1-year clock to complete the program by July 21, 2024. In our application, we stated that we will need to have multiple -- extensions to complete the program and are waiting to see if the FCC will grant a blanket extension or we will request an extension in the coming months on our own.

Gogo has incurred and will continue to incur costs for this program in 3 areas: First, network equipment to cell sites and datacenters; second, airborne equipment and related costs to enable existing customer aircraft to communicate to the new network, including swaps of LTE air cards to replace EVDO air cards; and third, operating expenses. We expect this spend to be partially offset by the FCC reimbursements.

In the second quarter, we recorded a $0.9 million receivable from the FCC, which is included in prepaid expenses and other current assets in our balance sheet, primarily for the reimbursement of network equipment purchases and a corresponding reduction to property and equipment. Since the program is currently partially funded, we have some optionality on what we request reimbursement for that could impact where grant money received will be recorded between the income statement and balance sheet.

In addition, the overall process is complex with specific documentation requirements that may change our assumptions on reimbursement accruals in our forecast. At a high level, we expect 2023 and 2024 free cash flow to be negatively impacted by the FCC program and a benefit in 2025 due to the timing of reimbursement proceeds. However, this timing is a bit unpredictable as we are still early in the process.

Now I'll turn to our financial outlook. Gogo is updating our fiscal 2023 financial guidance and long-term targets to reflect the market dynamics that Oak described, the impact of Gogo's participation in the FCC program, and the 5G delay. Gogo now expects 2023 total revenue to be in the range of $410 million to $420 million. This decrease is driven by expected reductions to both equipment and service revenue.

On the equipment side, the drivers are twofold. First, we have seen excess inventory in the channel as we adjust from long COVID lead times to our usual very short lead time. Second, we anticipated shipping of large backlog of 5G orders in Q4, but now will be delayed, pushing $7 million of 5G equipment revenue from 2023 to 2024.

On the service revenue side, the decrease is driven by the account suspension and activation issues we discussed in depth earlier, reducing our expectations for aircraft online for the year. We continue to expect 2023 adjusted EBITDA to be in the range of $150 million to $160 million. We are able to maintain adjusted EBITDA guidance despite lower revenue as we prudently managed cost down as well as push out 5G spend due to the (inaudible).

This guidance now includes operating expenses of approximately $20 million compared to $30 million previously for strategic and operational initiatives including $4 million and expected 5G delay, which reflects the shift of $5 million from 2023 to 2024, related to the chip delay. Approximately $13 million on Galileo development spend and approximately $3 million in additional operational initiatives focused on penetrating the 78% of the global business aviation in flight connectivity market that remains untapped and maintaining our long-term competitiveness.

Our adjusted EBITDA guidance also includes approximately $10 million of costs related to the FCC program offset by a $100 million of accruals for the expected FCC reimbursements. We expect our 2023 CapEx to be at the low end of our previously announced range of $30 million to $40 million including $12 million for the Gogo 5G program, which reflects shifting to $8 million, 2024 as a result of the 5G delay and approximately $3 million related to the FCC program. We are revising our 2023 free cash flow guidance to a range of $60 million to $70 million driven by the additional FCC-related spend, including increased inventory purchases and the expected lag of FCC reimbursements.

Before I review the revised long-term targets issued this morning, I'd like to provide some color on the expected financial trajectory for 2024. As we previously stated 2024 will continue to be an investment year with an increase in Gogo Galileo expense as anticipated, but now further burdened due to the push out of 5G spend these investments coupled with a lower shipments and lower aircraft online this year, and delay in 5G launch will negatively impact our financials, causing 2024 to be a trough-free cash flow year. Given the near-term headwinds Oak and I discussed, we have updated our long-term targets as follows.

We are revising our revenue growth at a compound annual growth rate to a range of approximately 15% to 17% from 2022 through 2027 with global broadband expected to materially contribute to revenue in 2025. We continue to expect annual adjusted EBITDA margin to be in the mid-40% range by 2027. We are revising our 2025 free cash flow target, excluding the impact of FCC, to be in the range of $150 million to $200 million with solid growth in 2026 and beyond. We expect the FCC program to negatively impact 2024 and to positively impact free cash flow in 2025, however, the timing of reimbursements is unpredictable.

While it is disappointing to lower targets, I would like to remind you of the evolution of our business since we set the $200 million of 2025 free cash flow target in September 2021. At that time, our target included delevering assumptions, but did not include investing in Gogo Galileo. Since then, we have been able to absorb the Galileo investments, the first delay of the 5G launch, and invest in operational initiatives.

With the lower aircraft online this year and now the second 5G launch delay, we feel it's prudent to provide an expected range for our free cash flow target as we make progress and continue to assess the potential impacts to our long-term plan. We believe that our value proposition is underpinned by this future strong growth in free cash flow and near-term headwinds reverse, we complete our Gogo 5G and Galileo investments and benefit from the revenue growth our new products and services will generate, and we execute in underpenetrated global markets.

Gogo is confident in our current strategy and market position and we are determined to support long-term success and deliver value for our shareholders and customers as we continue to grow our business.

Before we open the call up to questions, I want to thank the entire Gogo team for their continued commitment and for providing unparalleled service to our customers.

Operator, this concludes our prepared remarks. We're now ready for our first question.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Richard Prentiss with Raymond James Financial.

Richard Hamilton Prentiss - *Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst*

Yes, obviously, some disappointment on the 5G chip delay. You laid out pretty well the Airspan, the GCT, the Samsung, the sub-design shop. How comfortable are you that they have got the issue identified and what specific steps are they taking that give you confidence that the release date is mid '24 now?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes. I think we are very comfortable they've identified the root cause. And as I said in my comments, they're still developing the exact plan for remediation. We actually expect that next week. We're very confident GCT is going to deliver. I mean, they were a very significant design house in the 4G world, they did a great job there, and they are one of the few players that are confident enough to play in the 5G world.

Right now, there's really 2 chip companies that are producing 5G chips, Qualcomm and MediaTek and we were too small for them. There are 2 others coming along behind them, GCT is one of those two. We think they are front-runner there. So we are confident in them. They've also made some changes in their lineup in terms of the sub-design house that Samsung designated before now. They're pulling in a sub-design house that GCT is more familiar with and has worked with a lot in the past.

That gives us confidence and -- because of the sort of acute nature of this point, both Airspan and GCT have really opened up to a combined working team with Gogo's project management team to really manage this, I guess, in a more transparent manner for us, so that we can keep a very steady eye on how things are going. So we're confident, but as you know, there is always risk in these kinds of projects and we'll know more in a week or 2, and we'll keep people updated as things develop.

Richard Hamilton Prentiss - *Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst*

Great. Also in your prepared remarks, you talked about that there were some customers that were looking at wanting to understand competitive offers that might come into the marketplace. Can you elaborate a little further on that? Is that the GEOs, is that the LEOs, is that air-to-ground kind of where are people saying, well, let me take a look at what the competitors might be offering?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

I think everybody is kind of curious about what Starlink will do in this vertical. I don't want to speak for Starlink, and -- but I think that they seem more focused frankly in other verticals right now that are easier to serve, where there's less customer service demand and frankly, there's a lot more of a revenue opportunity for them. People are not terribly curious about GEOs at this point.

And frankly, due to some of the bad luck that Viasat had that the GEO presence in the market is, I think, more risk than it has been in a while. And I think we're very -- we're quite convinced that LEOs are going to replace GEOs overtime in this vertical. And then the last one would be SmartSky, who's still around and now has been making a lot more noise recently in terms of their publicity.

But I think they have a hard path in front of them just because their product is probably about half the speed of our 5G product. And their customer service is really not there, and this is a market where -- I think established player, that's profitable, that has great customer service, and has a reputation of delivering and a better product is probably going to win. So that's how we view the competitive environment.

Richard Hamilton Prentiss - *Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst*

Great. And then finally from me on the suspensions. Obviously, somewhat off guard. What's the best way that you all have found to kind of get a handle on the suspensions? And how should we - from the external side, what's the best way to think for us to kind of monitor suspensions and trends?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Well, we track every deactivation and suspension by cause, and I shared some of that data on the call. So -- and then on top of sort of tracking at all, we reality-tested are tracking in the quarter by reaching out to 100 -- I think, 97 accounts that had been -- that were suspended for more than 45 days in the second quarter. And we just basically collaborated our own data, most of the ones that were suspended were actually on -- still on maintenance.

So it's -- I think, it's hard from outside to really track it, Rick. I mean there aren't -- there not published data in terms of how many aircraft are in the shop, on the tarmac, or anything like that. I mean you can track it, probably, best just anecdotally and calling dealers and asking them what's going on. So, we did have one anomaly in the quarter that drove things a little bit, which is one fleet -- one small fractional fleet went bankrupt and that was 15 deactivations.

But in those cases, those aircraft will end up somewhere else and own by someone else, and they are already installed -- most people will turn those aircraft back on. So sometimes watching what's happening in some of the fleets, you can see the news and that would be an indicator of potential impact on us.

Operator

We have a question from Lance Vitanza with TD Cowen.

Lance William Vitanza - *TD Cowen, Research Division - MD & Cross-Capital Structure Analyst*

First on the 5G delay, obviously, disappointing for Gogo and its investors, but what are you hearing if anything from your customers? I guess are aircraft owners and/or dealers, are they complaining, are they frustrated? I know in the last question, you talked about some of the competitive questions. But is your sense that are the questions around competition intensifying in the wake of the 5G delay or are people kind of taking it in stride? I'm just trying to get a sense for the impact on pent-up demand for a competitive product here?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes. No, I don't think it's changing the competitive dynamic. And the people are actually pretty excited about having the LX5 finally announced in public and the delivery date on that to coincide with the launch of 5G. A lot of -- and I would say this, most of our big customers and dealers and OEMs were aware that LX5 is coming along under NDA. So and they -- and that, they really love that product.

I mean it's so much easier to install than former configuration where we had an L5 box in this X3 box. So people are really happy about that. We are continuing to take orders. There are people who are changing orders from X3 and L5 to LX5 already. And while people are a bit disappointed, I think there are some of the dealers out there who are kind of relieved and some of the OEM aftermarket divisions are relieved because they were kind of behind on their SDCs, and this gives them a chance to catch up. A couple of them probably -- that relief as well. So I don't think we see a big impact. Of course -- but the impact for us is just the [revenue loss] and the unit count and the (inaudible).

Lance William Vitanza - *TD Cowen, Research Division - MD & Cross-Capital Structure Analyst*

Sure, of course. So on the suspension side, your comment that when planes are grounded, they don't want to pay for Internet. But I just wanted to probe that a little bit more because part of our investment thesis at least has been that, the cost of Internet was a pretty small fraction of the total cost of aircraft ownership, kind of whether you're flying it or not. Perhaps, that's no longer the case. Can you discuss that concept and maybe remind us if you're paying Gogo -- I know obviously the costs are going to vary depending on what type of claim you have. But if you're paying Gogo, let's say $3,000, $4,000 a month for Internet, how much are you paying to hanger the aircraft and the other kind of ancillary expenses that are needed to maintain that plane?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Well, you're paying a lot more, that's for sure. I can't give you an exact breakdown of what we're paying to hanger the aircraft. I mean most of these aircraft, that they are stuck without engines. For instance, and they're sitting out on the tarmac. I doubt they're getting charged that much by the dealer rather just sitting out there. They probably have some fee but I'm not aware of exactly what it is.

The dealer is going to make most of their money, taking engines off, repairing them, putting them back on. They probably make some money in leasing engines for temporary use, which there -- which have -- which are hard to find right now and that's part of what the dealer would be charging. But I think that people --flight departments are trying to make the owners happy, and often owner's going to ask, well, I'm sitting here for 6 months not able to use my plane.

Why shouldn't we be able to reduce the expense in operating it, and the pilot and the director of the flight departments might be able to say. Yes, we shut down the Internet, we're not doing this, we're not paying for that. So you're actually saving money while we are sitting here. So and we've always offered suspensions for maintenance and it's one of the things customers like about us. So it's very common for that, for this, it's if you go back to COVID for instance, we had a huge number of suspensions.

So, I think 20% of the customer base suspended service. So this isn't -- I would just say, it's not very unusual in times when people are suspended -- when they are down for maintenance for a long period for them to suspend. And we also view it as something that, frankly, if you look at what Starlink says, Starlink says you can turn off your Internet anytime. We don't want to them start making people pay for when their plane is down on the ground.

Lance William Vitanza - *TD Cowen, Research Division - MD & Cross-Capital Structure Analyst*

Sure. And in any case, it ultimately, right, we certainly want the logjam removed. Is your sense that are -- is the industry sort of responding to the problem or are we seeing more capacity coming online or do you think that we will see more capacity come online or is it just, no, we're just going to have -- we're going to have to sort of suffer through this period of excess demand for engines and parts and so forth?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Well, I think the engine OEMs are -- they're cranking up their production as fast as they can. That's where the parts shortages really are impacting supply. And they've been hit with a couple of things, there has been a pretty dramatic increase on orders at the business aircraft OEMs which is driving demand for engines, and then this unusually high activity in maintenance events where people are wanting to lease additional engines at the same time.

So, we would expect that they will be working through that over the next couple of quarters and that the supply will increase. And also the aircraft that need to go in for these big C checks will get through those and that demand will decrease. It's hard for us to predict the pace of that though. So, we're not putting a quarter on it when it's going to all turnaround. And yes - I would say, I imagine it will take a couple quarters.

Lance William Vitanza - *TD Cowen, Research Division - MD & Cross-Capital Structure Analyst*

Sure. And then maybe just one quick one for Jessi. You mentioned this on the call that EBITDA, it sounds like it benefit -- EBITDA on the quarter sounds like it benefited from some non-recurring and perhaps noncash items in the quarter, could you just go over those again quickly for me?

Jessica Betjemann - *Gogo Inc. - Executive VP & CFO*

Not the EBITDA, it was net income. So our net income benefited from a tax benefit because we had a reversal of our valuation allowance. And then on the EBITDA side, there was a reduction in personnel expenses due to a lower bonus expense. So that's not going to be necessarily recurring, but that was a benefit in the quarter for the EBITDA.

Operator

We will have a question from Phil Cusick from JPMorgan.

Philip A. Cusick - *JPMorgan Chase & Co, Research Division - MD and Senior Analyst*

So you've addressed this somewhat already, but I wonder if you could just explain to me, so #1, where we are in the inventory issues? You talked about inventory drawdown last quarter. And #2, why do these maintenance issues hit now? You had a deceleration for a couple of quarters in terms of ATG net adds, but this is pretty stark. And I don't understand why it's happening right now and how we should think about 3Q on that path. I heard Jessi, I heard you talked about better in the second half, but the trend is not -- doesn't look great for 3Q?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes. I mean I think now, because what happens in the charter and fractional markets, we had such huge demand over the last couple of years they didn't have enough jets to meet that demand. They're now taking deliveries at a more rapid pace from the OEMs and that's helping relieve that demand. But what -- there are a number of ways you can maintain an aircraft.

One is that you take it in for more frequent short inspections and maintenance events. And then that reduces the amount of time you have to be in for a large type of C-check kind of maintenance event. But when you've got a lot of demand and you've got taking that jet out-of-the-sky for those sort of short intervals, so there'll be revenue hit. The number of charter operators and fractional would say, okay, well that's optional.

We don't have to maintain it that way, we don't have to take it out now so let's delay. Once that has delayed, has put more pressure on these big maintenance events this year, and we've seen it climb steadily and started climbing first quarter I think. We didn't understand the full extent of that, to be honest. We should have. But it did really accelerate this quarter. But when we go in and really look at it and we go talk to people.

It's nothing different in terms of what's -- it's just the numbers that are different, it is nothing different in terms of -- are they're going to competitors or they are shutting off, because they don't want the Internet or whatever. So, I think that's the real cause, Phil, in terms of why is rev is going up now. I can't tell you that we can predict exactly where that's going to go in Q3 and Q4.

But we started calling around some dealers last week saying, hi, when can I get into get a C-check if I wanted to. And there was -- the one answer we got -- first answer we got was Q2, 2024. A couple of other dealers were more in the fourth quarter of this year. So there are -- there is demand and people are booked. Right. What was the second part of your question, Phil that wasâ€¦?

Philip A. Cusick - *JPMorgan Chase & Co, Research Division - MD and Senior Analyst*

Well, I was just trying to -- the other would be where we are in the inventory sort of drive-down issue you've been watching. But just to go back to your comment, Oak. So do you see this easing in July and into August, or should we think about a sort of very low third quarter and then a bounce in the fourth quarter? I'm just trying to get an idea of where you see the sort of current level?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes, I can't give you any more than I've given you. We don't know what's sitting out there in terms of 3,000 planes that could be, hopefully, I think going to need to go into maintenance. So, I mean we're calling around and trying to figure that out. But I -- frankly, I just cannot predict. I can't answer that question. On the inventory front, the biggest thing is how much of that inventory sitting out there is spoken for and how much isn't.

And I think, we're feeling pretty good about that, because the amount that spoken for went up to 85% in Q2. So I think -- well, it's a couple of things. First of all, it's about 900 units that are in -- that inventory count, about 200 of those are on aircraft already, but not activated because they are installed at OEMs where we're basically standard line fit, so we come out on every aircraft. Not everybody wants the Internet, however, some aircraft go overseas, they can't really use it overseas, because we're a North American ATG company, and others just don't turn it on.

They didn't want to order it, it was just part of the aircraft standards. So there's -- that's 200 of the units. So then we're down to 700. Out of the 700, there's about a 130 units that are not spoken for right now, and the vast majority of those, about 90 are at dealers that regularly churn through inventory. So, we feel good that those are getting installed. And then there's another 40 or so that are dealers -- that basically ordered that inventory during COVID just in case somebody came in and wanted it installed.

But they don't regularly churn through our inventory. So, those might be at risk for not being installed for a while, but the rest I think are pretty solid. The other thing is activations are good. I mean we're having a record year on activations. So, it's really not the pace at which equipment is going into aircraft that's hurting us, it's the pace of suspensions.

Operator

Our next question will come from Simon Flannery with Morgan Stanley.

Simon William Flannery - *Morgan Stanley, Research Division - MD*

I wanted to come back to the new product developments. Well, help us with the timing of getting real revenues add with the 5G product and add with the Galileo product. Does that really start from early Q3 or we actually going to see aircraft flying and start to ramp fairly steadily from there or is this sort of â€“ it will be a couple of quarters to really embed this, get it working properly and then it's really more of a 2025, before we see any material revenues from that. Any color around that be great?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes. I mean, I think, we often get a boost in equipment revenue when we first launch if there is a backlog of orders. So, you could see that in Q3 and Q4 next year. Service revenue, then those have to get installed and so service revenue ramps a little more slowly.

Simon William Flannery - *Morgan Stanley, Research Division - MD*

But when do you think -- you'll actually have these services installed on the aircraft and actually start generating revenues? Is that a Q3 event for both of them?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Well on 5G part, we said with mid-year would be the launch, plus or minus 1 or 2 months depending on the exact remediation plan that the GCT implements. There's 4 options right now and -- but they all would have us launching midyear plus or minus 1 or 2 months on either side, depending which one they end up with. We'll know that in about a week.

So you could see shipments in Q3 or if there's a delay or whatever may be Q4 for 5G when we first start to ship, and then the service revenue would ramp up as those got installed in '25. And I'd say, it's kind of the same on the HDX terminal with Galileo. Yes. The FDX terminal won't be until '25 of course.

Simon William Flannery - *Morgan Stanley, Research Division - MD*

And then on the Galileo, you gave some speed estimates on the performance there. How does performance stack up versus Starlink for the OneWeb product? Is it going to be pretty comparable or big difference - inter-satellite links and things like that?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes. I think we'll be comparable. And then with Gen 2, we may even move ahead a little bit. To be clear, the new announcement was around our FDX antenna, which is a larger ESA than the earlier announcement, which was HDX. So the performance data I shared of 190 to 200 megabits per second was the FDX performance, all right? And that's designed for heavier aircraft.

Starlink's, it's still smaller than StarLink's antenna and in terms of performance, we think it's comparable. I mean on JSX, they're doing 100 to 150 megabits per second. So -- and everybody is very happy about that. So, we think 190 to 200 is a great speed and will be viewed as comparable.

When Gen 2, when will it comes out, which will have inter-satellite links and all that, we actually see that speed doubling or tripling even. So that will be obviously a few years out, but it will be great. There'll be a really great performance.

Operator

And our next question comes from Louie DiPalma with William Blair.

Michael Louie D DiPalma - *William Blair & Company L.L.C., Research Division - Analyst*

Oak, is there any change to the planned commercial launch timing for Galileo? And is there significant chip risk for the Galileo product?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

No, there's no chip risk for the Galileo product. All that is working already, which is why we were able to demo it. And there's been timing -- the only timing is we actually pulled the delivery of the smaller Galileo antenna, the HDX in 2 months, but we did that a quarter or so ago. So nothing new in this quarter.

Michael Louie D DiPalma - *William Blair & Company L.L.C., Research Division - Analyst*

Okay. So is it still on track for the second half of '24 then for the smaller one?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes, exactly. Second half '24 for the smaller one and the first half of '25 for the larger one.

Michael Louie D DiPalma - *William Blair & Company L.L.C., Research Division - Analyst*

Sounds good. And the engine logjam issue is well documented in the engine MRO industry for business aviation. However, are there any signs that a significant portion of the deactivations is related to customers leaving for competitors or are you able to pinpoint it too, the engine logjam issue?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

I think we are able to pinpoint it. I mean, we actually reached out to 190-some-odd customers in Q2, who had been suspended for more than 45 days, 66% of those responded and not one was going to a competitor.

Michael Louie D DiPalma - *William Blair & Company L.L.C., Research Division - Analyst*

Sounds good. And for the FCC reimbursement plan, the strategy is to upgrade the Gogo Classic customers to AVANCE. Has there been any pushback from some of your strategic customers or do you have visibility that you're going to be able to upgrade essentially all of your strategic customers with this plan?

Oakleigh Thorne - *Gogo Inc. - Chairman & CEO*

Yes, they're all strongly -- they need the upgrades, and they need to do them anyhow. I mean a number of them have been putting off upgrade programs and are still flying the Classic product and their customers don't like it anymore so they need to upgrade. So, we are making good progress there, Louie.

Operator

I'm showing no other questions in the queue. I'd like to turn the call back to Will Davis for closing remarks.

William G. Davis - *Gogo Inc. - VP of IR*

Thank you, Catherine. This concludes our second quarter earnings conference call and you may disconnect.
