

## **Operator**

Ladies and gentlemen, thank you for standing by. Welcome to the Boeing Company's First Quarter 2019 Earnings Conference Call. Today's call is being recorded. The management discussion and slide presentation, plus the analyst and media question-and-answer sessions, are being broadcast live over the Internet.

At this time, for opening remarks and introductions, I am turning the call over to Ms. Maurita Sutedja, Vice President of Investor Relations for the Boeing Company. Ms. Sutedja, please go ahead.

## **Maurita Sutedja**

Thank you, and good morning. Welcome to Boeing's First Quarter 2019 Earnings call. I'm Maurita Sutedja, and with me today is Dennis Muilenburg, Boeing's Chairman, President and Chief Executive Officer; and Greg Smith, Boeing's Chief Financial Officer and Executive Vice President of Enterprise Performance and Strategy.

After management comments, we will take your questions. [Operator Instructions]. As always, we have provided detailed financial information in our press release issued earlier today. And as a reminder, you can follow today's broadcast and slide presentation to our website at [boeing.com](http://boeing.com).

Before we begin, I need to remind you that any projections and goals we include in our discussions this morning are likely to involve risks, which is detailed in our news release and our various SEC filings and in the forward-looking statement disclaimer at the end of this web representation.

In addition, we refer you to our earnings release and presentation for disclosures and reconciliation of non-GAAP measures that we use when discussing our results and outlook.

Now I will turn the call over to Dennis Muilenburg.

## **Dennis Muilenburg**

Thank you, Maurita, and good morning. Let me start by saying that all of us at Boeing have been deeply affected by the accidents in Indonesia and Ethiopia beyond anything I can recall in my 34 years with this great company. We all feel the loss and the gravity of these events personally, and we continue to extend our deepest sympathies to the families and loved ones of the passengers and crews on-board the flights. Nothing is more important to us than the safety of the flight crews and passengers who fly on our airplanes. We know every person who steps aboard one of our airplanes

places their trust in us, and we are committed to earning and re-earning that trust and confidence.

Recent events have been a deep reminder of the importance of our enduring values at Boeing: safety, quality, and integrity, even more so in the difficult times we face now. Our work demands the utmost excellence. These recent accidents have intensified our commitment to continuous improvement as we design, build, and support the safest airplanes in the sky. That's our responsibility to our customers and their passengers. We own it.

I know from personal experience that when there's something that we can do to make any of our products better and safer, we will do it. If there's something that we can do to help our customers improve the training and education of their pilots or mechanics, we will bring that forward. If there's something that we can do to make airplane development programs or the certification process better and safer, we will pursue it. Our culture is to go above and beyond, to deliver safe airplanes and live by a commitment to continuous improvement.

Ever since the Lion Air accident, our top technical experts, engineers, and test pilots have been working with regulators from all over the world on a software update that will make the 737 MAX one of the safest airplanes ever to fly. Our test pilots now completed over 135 flights, totaling more than 230 hours of airtime with the software update. We are taking a disciplined approach, completed our technical flight-testing last week, and look forward to completing near-term milestones leading to final certification.

As part of our continued collaboration with hundreds of stakeholders, nearly 90% of our 50-plus MAX operators around the world have participated in simulator sessions that include the software update. We're committed to ensuring all who operate the MAX are fully prepared when the grounding is lifted and the fleet returns to service. This includes a comprehensive package of training and educational resources that we're developing and deploying.

In light of our commitment to continually improve safety, as we have always done, I've asked the Boeing Board of Directors to establish a committee to review our company-wide policies and processes for the design and development of the airplanes we build and to assure the highest level of safety on the 737 MAX program as well as our other airplane programs and to recommend improvements to our policies and procedures.

As we continue to work through these steps, and as previously announced, we adjusted the 737 production system temporarily from 52 aircraft per month to 42 per month to accommodate the pause in MAX deliveries,

allowing us to prioritize additional resources to focus on safely returning the MAX to service. This decision will also enable us to invest in the broader health and quality of our production system and supply chain. We will continue to assess our production plans, and we'll make decisions at various waypoints as to whether further rate adjustments are needed based on information we have at that time.

The timing of return to service for the MAX will continue to be paced by ongoing work with global regulators and our customers. Our previously issued 2019 financial guidance does not reflect the MAX impacts. Due to the uncertainty of the timing and conditions surrounding the return to service of the 737 MAX fleet, new guidance will be issued at a future date.

I want to personally thank the various government agencies, our industry partners, and my Boeing teammates for their tireless efforts over the past few weeks and months. This includes the more than 600 737 suppliers, many of whom are small to mid-sized businesses, who have stepped up to work with us as we navigate the 737 production plan changes. We could not build our airplanes without them.

On behalf of the entire Boeing team, I also want to thank our customers and their passengers for enduring the disruption caused by this issue. We deeply regret the impact this has created.

Our company's 100-year-plus legacy is built on the foundation of developing, producing, and supporting safe products. We are committed to ensuring the 737 MAX achieves the highest standards for safety, performance and reliability.

Now let me turn to an overview of our first quarter operating performance, followed by an update on the business environment and our expectations going forward. After that, Greg will walk you through the details of our financial results and how we are maintaining financial discipline and prudently managing liquidity as we work through the safe return-to-service of the MAX.

With that, let's move to Slide 2. Thanks to the dedicated efforts of our teams across the company during the quarter, we recorded revenue of \$22.9 billion and core earnings per share of \$3.16, reflecting lower volume of 737 deliveries, partially offset by higher defense and services volume. We generated \$2.8 billion of operating cash and paid \$1.2 billion in dividends, reflecting a 20% increase in dividends per share from last year.

Now let's look at the first quarter operating performance for our businesses. For the quarter, Commercial Airplanes generated revenue of \$11.8 billion reflecting 149 deliveries. Fewer 737s were delivered in the quarter due to

the grounding of the 737 MAX. We saw healthy widebody orders in the quarter, and our backlog remains robust at more than 5,600 airplanes worth \$399 billion. Key commercial milestones in the quarter included the 787 program's smooth transition to rate 14 per month while maintaining the highest quality standards, and the first 777X flight test airplane rolled out after passing the factory gauntlet test. 777X flight testing will begin this year with first delivery and entry into service as scheduled for 2020.

Now over to Defense, Space & Security. BDS reported first quarter revenue of \$6.6 billion and booked \$12 billion of new orders, demonstrating the value we bring to our customers across our Defense, Space & Security portfolio. These orders included a multiyear contract for 78 F-18 Super Hornets; contract for five Extra Large Unmanned Undersea Vehicles for the U.S. Navy; 5 E-7 AEW&C aircraft for the U.K. Royal Air Force; and 19 P-8 Poseidon aircraft for the U.S. Navy, Royal Norwegian Navy, and the U.K. Royal Navy. Key milestones for BDS included completion of the first Ground-Based Midcourse Defense test with two interceptors, demonstrating the robustness of the system, successful environmental testing of the Commercial Crew spacecraft and the first flight of the SB>1 DEFIANT helicopter. We delivered the first 7 KC-46 Tankers to the U.S. Air Force in the quarter, with the eighth delivered just this past Friday. We are committed to continuous improvement in delivering the highest quality products to our customers. We look forward to working with the Air Force and the Navy during their initial operational test and evaluation of the KC-46 as we further demonstrate the operational capabilities of this next-generation aircraft across refueling, mobility, and combat weapon systems missions.

Turning to Global Services. BGS reported revenue of \$4.6 billion, representing 17% growth year-on-year. Since its operations began in July of 2017, BGS' growth has consistently outpaced the average for the services market. BGS continues to win new business, highlighting the value we bring to our broad range of commercial and government customers and the strength of our One Boeing offerings. During the quarter, BGS won new business totaling approximately \$4 billion, which included contracts for V-22 Performance-Based Logistics for the U.S. Navy and P-8A training for the U.K. Royal Air Force, an order for GECAS for 10 737-800 converted freighters and an agreement to optimize crew operations for Royal Air Maroc. Additionally, BGS expanded its global distribution of hardware and chemical products through a long-term agreement with Dubai-based Joramco.

Also in the quarter, to expand its rapidly growing unparalleled digital services portfolio, BGS completed the acquisition of ForeFlight, a leading provider of innovative mobile- and web-based aviation applications. We also achieved a major milestone in our proposed strategic partnership with Embraer. On February 26, Embraer received its shareholder approval to

proceed with the deal with over 97% support. Over the coming months, we'll continue to work with Embraer, global regulators and other stakeholders to complete the transaction and create the most important strategic partnership in the aerospace industry.

In summary, our current first order of business is to -- is the safe return to service of the 737 MAX, and we've made the adjustments necessary to allow our teams to prioritize additional resources and focus on this effort. At the same time, we are maintaining our focus on keeping the business strong and healthy. As they demonstrated in the first quarter, our team continues to execute on operating performance and capture noteworthy additions to our large and diverse backlog.

With that, let's turn to the business environment on Slide 3. We continue to see healthy global demand for our offerings in commercial; defense, space; and services. These are sizable sectors that are growing and backed by strong fundamentals, with a combined market opportunity of \$8.1 trillion over the next 10 years. As a global company with more than 100 years of history and customers in 150 countries, we value and maintain strong relationships with our customers, suppliers and other stakeholders around the world, reinforcing the mutual economic benefits of a strong and prosperous aerospace industry. Recent events underscore the value and importance of those relationships.

In commercial aviation, global passenger traffic continues to grow faster than GDP and long-term trends. In 2018, we saw the ninth straight year of above trend growth passenger traffic. So far in 2019, passenger traffic has grown at 5.9% through February.

On the air cargo market, we saw a contraction in the year-to-date traffic. While we expect the cargo traffic headwinds to linger in the near term, we anticipate recovery in the latter part of the year. Our view of the demand fundamentals remains unchanged. We remain highly confident in our industry outlook, which forecasts the demand for nearly 43,000 new airplanes over the next 20 years, which will help double the size of the global fleet. We believe the changing nature of travel has fundamentally expanded traffic patterns and supports sustained growth. At the same time, airlines are maintaining capacity discipline and keeping supply and demand in balance as industry profitability remains near historic highs.

I will also note as an aside that there's a demand for nearly 800,000 qualified pilots over the next 20 years and around 750,000 maintenance technicians. And we, at Boeing, are committed to doing more to ensure that, that demand is met. You'll hear more from us on this as we work with global partners to develop the way forward.

It is clear that long-term demand fundamentals provide a solid foundation for our commercial business. There also is more balance between airplanes purchased for fleet growth and replacement, leading to more stable purchasing patterns. We believe the evolution in these key market dynamics in aggregate continues to drive less cyclical for our industry.

The narrowbody segment will command the largest share of new deliveries. We expect airlines to need more than 31,000 single-aisle airplanes in the next 20 years. These new airplanes will continue to stimulate growth and provide required replacements for older, less efficient airplanes. Our 737 program has a backlog of more than 4,400 aircraft and a production skyline that is sold out into early next decade.

In the widebody segment, we have seen steady orders for the 787 and the 777, and we have high confidence in a meaningful increase in widebody replacement demand early next decade. The current generation 777 continues its steady sales momentum with two new orders from DHL. These additional orders brought the backlog to 92 aircraft and provide further support for the 777 bridge.

Turning to 777X. We added a new customer in the quarter with 18 new orders, plus 24 options from IAG Group, the parent of British Airways. We are honored that British Airways has selected the 777X as part of its fleet for its next century. These orders bring total 777X orders and commitments to 364, a strong foundation that supports our plan for ramping up production and delivery of this new aircraft. We continue to focus on further bolstering the 777X skyline. We continue to expect the delivery rate to be approximately 3.5 aircraft per month in 2019 as we transition to the 777X with a slight increase in 2020 as we continue to assess 777 demand as well as 777X timing.

The 787 Dreamliner extended its status as the fastest-selling, twin-aisle jet in history with 38 net orders in the quarter, adding to more than 1,400 since the program launched. With approximately 600 aircraft in our 787 backlog, our current production rate of 14 airplanes per month is well supported. In the quarter, we captured 38 new orders for 787, including 20 from Lufthansa and 10 from Bamboo Airways. Also earlier this month, we delivered the first 787-10 to All Nippon Airways. With this milestone delivery, ANA becomes the first airline in Asia to operate the entire Dreamliner family. The market-leading fuel efficiency of the 787 has enabled ANA and more than 50 other airlines to open more than 230 new nonstop routes around the world.

On our 767 program, we added four new 767 freighter orders in the quarter. And as previously announced, we plan to increase the 767 production rate from 2.5 per month to three per month in 2020.

At Defense, Space & Security, we continue to see solid demand for our major platforms and programs. The BDS portfolio is well positioned with mature, world-class platforms to address current needs and innovative, capable and affordable new franchise programs to build the future. We continue to see broad support for our products from the Pentagon, NASA and Congress. The President's fiscal year 2020 budget proposal includes the purchase of Boeing F-15 and F-18 fighter jets, Apache and V-22 Osprey rotorcraft, JDAM weapons, satellite programs and key commercial derivative programs like the KC-46 Tanker and the P-8, among other platforms.

Our fighter line is in one of the healthiest positions since the start of the decade. We continue see support for the F-18 through the recent multiyear award, which will take deliveries through 2023. We expect to continue delivering Super Hornets off our production and service like modification lines to the U.S. Navy into the 2030s, where they will be at the forefront of naval aviation for decades to come.

At the same time, the President's budget leverages billions of dollars on technology upgrades made by Allied Nations to pursue and purchase the next-generation Eagle, the F-15X, allowing U.S. Air Force to replace its fleet of F-15Cs with a more capable, survivable and affordable air superiority fighter.

We are also maintaining a clear focus on future franchises, including the ongoing MQ-25 and T-X development programs with flight test scheduled for this year, our NASA Commercial Crew and Space Launch System programs at the leading edge of space exploration and the GBSD competition. Demand from outside the U.S. for our defense and space offerings also remains high, in particular for rotorcraft, commercial derivatives, fighters and satellites.

Turning to the Services sector. We see the \$2.8 trillion services market over the next 10 years as a significant growth opportunity for our company. BGS provides agile, cost-competitive services to our customers worldwide. We aim to continue growing faster than the average services market growth rate of 3.5% as we further expand our broad portfolio of services' offerings and continue to gain market share. Strong orders of \$4 billion in the quarter reflect our customers' recognition of our value proposition in helping them optimize the performance of their fleets and reduce operational costs through the life cycle. Our expertise, the global reach of our business and our strong customer partnerships have us well positioned to compete and win in this sector.

In summary, the growing markets and opportunities ahead, our team remains committed to growth, innovation and accelerating productivity improvements to fuel our investments in the future. Our One Boeing

strategy and offerings across our three businesses are key differentiators that strengthen our position as the world's leading aerospace company. As we work to safely return the 737 MAX to service, our team is determined to keep improving on safety in partnership with the global aerospace industry and the broader community to ensure air travel remains the safest form of transportation the world has ever known.

With that, Greg, over to you for our financial results.

### **Gregory Smith**

Thanks, Dennis, and good morning, everyone. Before we discuss the first quarter results, let me also touch on the 737 MAX and explain how the grounding has impacted our financials to date and what we're focused on today and going forward. Let's move to Slide 4, please.

As a result of the 737 MAX grounding, we delivered over 50 fewer 737 aircraft in the quarter than originally planned. This resulted in lower BCA revenue, operating earnings and cash. In addition, BCA earnings were also reduced by period costs associated with the MCAS software update and development of related training materials. We also booked approximately \$1 billion of additional costs due to the adjustment to the production rate to 42 a month. The additional costs are due to the lower production rate causing fixed costs for the 3,100 aircraft in the block to be amortized over a longer period of time. Costs also included additional labor, escalation and support. This, therefore, reduced the 737 program and overall BCA margins. As you know, when the program margin is adjusted, it will affect current quarter and booking margin for subsequent periods.

With regards to cash, lower delivery payments due to fewer 737 deliveries, combined with building and storing 737 aircraft, adversely impacted operating cash in the quarter. Now looking forward, the key drivers of financial impact related to the 737 are return to service time line and conditions; the delivery ramp-up, which will depend then on how fast we can deliver the aircraft once the fleet returns to service and how fast our customers can accept the aircraft; and finally, the 737 production rate profile going forward. These factors will impact the future delivery rate profile and, therefore, impact revenue and earnings. It will also influence the cash receipt profile, including both delivery and prepayments -- predelivery payments. This, in conjunction with corresponding supply chain arrangements, will determine our cash expenditure profile and associated working capital going forward. We expect our financial results to continue to be adversely impacted until we safely return the 737 MAX to service, ramp up production rates and resume deliveries to customers. We will continue to assess our production plans going forward and have established waypoint



milestones along our plan. This will allow us to make decisions based on information we have at that point on whether to further adjust production rates as required.

From Day 1 of the grounding, we've been doing detailed scenario planning around return to service and production rates, including analyzing the implications on our supply chain, customer fleet and deliveries to fully understand the range of financial outcomes. At the same time, we've been proactively and prudently managing our operations and liquidity position and working on actions to minimize the impact on our customers and our financials. As Dennis noted, we're taking steps amid current challenges to preserve the future value and growth of this important franchise for our company and for our customers. Some of these proactive steps include the production rate adjustment to 42 a month, and we've initiated comprehensive daily oversight into factory health such as reduction in jobs behind schedule and also suppliers' progress to getting back to master schedule, customer delivery profile and path to seamless return to service. We've also taken actions to prudently manage liquidity and increase our balance sheet flexibility. These include an even sharper focus on productivity and strategic prioritization of spending. We're diligently reviewing all levers available to minimize the financial impact. Our multiyear-focused efforts on disciplined cash management, productivity efforts and growing healthy margin businesses help position us on better footing to navigate the current challenges.

As Dennis mentioned, given the dynamic of 737 MAX return-to-service time line in activities, we are not in a position today to provide a forecast of the impacts of the 737 MAX grounding on our full year 2019 financials. We will provide you with an update of full year 2019 financial forecast when we have clarity on return to service of the MAX fleet, our production plans, delivery ramp-up profile and corresponding financial impacts. Returning the MAX safely to flight has been priority one and a team effort that leverages the best talent from across Boeing. Since Day 1, we've established a cross-functional team following a disciplined process to organize and manage a broad range of activities involved. We've assigned a leader of our enterprise program management function to manage this critical effort with senior leaders, established a situation room to facilitate the discussions and track upcoming activities and deliverables. The team meets daily with our executive council fully engaged. We have dedicated senior management leads for key elements, such as investigation and return-to-service activities, regulatory process, customer support and training, customer engagement, 737 production supply chain, government relations, finance, communications and branding. We've also brought in outside technical and strategic experts to assist in areas such as engineering reviews and strategic communications

as we work to restore the confidence across all our stakeholders. We will continue to apply whatever resources are required to return the 737 MAX safely into the fleet and take the time necessary to do so, working hand-in-hand with our customers. At the same time, we will also remain focused on our priorities in delivering results with excellence.

So with that, let me move to Slide 5, and I'll discuss our first quarter results. Revenue for the quarter was \$22.9 billion, reflecting lower Commercial Airplane deliveries partially offset by higher Defense and Services volume. Core earnings per share of \$3.16 reflects these, along with a lower tax rate and a customer financing impairment.

Now let's discuss Commercial Airplanes on Slide 6. Our Commercial Airplane business revenue decreased to \$11.8 billion during the quarter, reflecting the more than 50 fewer 737 deliveries I mentioned earlier. That was partially offset by favorable mix in the quarter. BCA operating margins decreased to 9.9% driven by lower 737 deliveries, partially offset by higher 787 margins. The margins include the 737 MAX impacts I outlined earlier. In the quarter, BCA captured 91 net new orders but also removed 210 aircraft in backlog related to Jet Airways due to liquidity issues experienced by the airline. The net impact was a \$3 billion net order increase. BCA's backlog continues to remain strong at \$399 billion and more than 5,600 aircraft equating to more than six years of production.

Let's now turn to Defense, Space & Security results on Slide 7. First quarter revenue increased to \$6.6 billion, reflecting higher volume across satellites, weapons and surveillance aircraft, which is partially offset by lower C-17 volume. Our continued focus on productivity and execution result in margins growing to 12.8%. The margins include solid program performance, a gain on sale of the property partially offset by unfavorable mix. The sale of this excess property is the result of the team's continued market-based affordability efforts to optimize our footprint. During the quarter, BDS won key contracts worth \$12 billion, and our backlog stands \$67 billion with 31% from outside the United States.

Let's turn now to Boeing Global Services results on Slide 8. In the first quarter, Global Services revenue increased to \$4.6 billion, reflecting higher volume across the portfolio and the acquisition of KLX completed in the fourth quarter of last year. Year-over-year growth of 17% for the quarter outpaces the average annual service market growth rate of 3.5%. BGS operating margins of 14.1% reflect ongoing productivity efforts offset by mix of products and services in the quarter and the unfavorable adjustment on the defense training contract. During the quarter, BGS won key contract awards worth approximately \$4 billion, and our backlog now stands at \$21 billion.

Let's turn now to cash flow on Slide 9. Operating cash flow for the first quarter was \$2.8 billion driven by lower 737 deliveries, offset by solid underlying performance and favorable timing of receipts and expenditures. As mentioned earlier, we expect continued working capital pressure to adversely affect cash flow until MAX deliveries resume. Strong operating cash flow from other parts of the business, a strong balance sheet and further balance sheet levers will help provide appropriate liquidity during this period. In the first quarter, we paid \$1.2 billion in dividends, and we repurchased \$2.3 billion of Boeing stock in the quarter. And until we have clarity on the 737 MAX return-to-service, we have temporarily paused our share repurchase program. However, our long-term balance cash deployment strategy and commitment remains unchanged.

Let's now move to cash and debt balances on Slide 10. We ended the quarter with \$7.7 billion of cash and marketable securities, slightly increased debt levels and stable credit ratings. Our credit rating of A and A2 were recently affirmed. Our strategy of maintaining a strong balance sheet provides us with substantial borrowing capacity through capital markets access and unused credit facility of \$5.1 billion.

We have ample access to long-term debt in the bond markets and short-term debt in the commercial paper markets. Our long-term goals and strategic objectives remain unchanged. We will continue to use our three business units strategy as a key differentiator in the marketplace, make prudent investments and leverage talent innovation from across the company.

So in summary, while focusing on the very important priority of safe 737 MAX return-to-service and minimizing the significant impact on our customers and the flying public, our team continues to keep the core operating engine strong, delivering results and meeting customer commitments. We recognize that we have a lot of work and not insignificant challenges in front of us in the weeks and months to come, but we're confident we have the right focus, team and resources to navigate through them. We are committed to providing you with additional updates on the MAX return-to-service progress and production plans as we have more information. We will strive to continue to keep all of our stakeholders informed through our public statements and information posted on our website. Once we have further clarity, we will schedule a follow-up investor and media conference call to discuss the financial impacts and revised 2019 guidance.

So with that, I'll turn it back over to Dennis for some closing comments.

**Dennis Muilenburg**

All right. Thank you, Greg. When I started at this company more than three decades ago, our amazing people inspired me. I see how they dedicate their lives in extraordinary talents to connect, protect, explore and inspire the world safely. And that purpose and mission has only grown stronger over the years. Our team is determined to keep improving on safety in partnership with the global aerospace industry and broader community. It is the shared sense of responsibility for the safety of flight that spans and binds all of us together. Our leadership role is clear. Our commitment is resolute, and our pursuit of excellence is never ending. We own it. In these challenging times, I'm even more confident in our team and our customers. We'll stay true to our values, and we will come through this even stronger.

While we continue to be focused on the very important priority of engaging with our global regulators and customers on the safe return to service of the 737 MAX, I'd also like to thank the Boeing team for remaining focused on further driving both growth and productivity. We wouldn't have been able to achieve these first quarter results without the hard work and dedication of our employees and the great partnerships we have with our customers and suppliers. The long-term fundamentals for our business remains strong, and our key priorities are unchanged. We will continue to execute on our long-term strategy of robust organic growth investment and returning value to shareholders, complemented by strategic acquisitions that enhance and accelerate our growth plans. We will leverage our unique One Boeing advantages, continue building strength on strength to deliver and improve on our commitments to our customers and partners around the world.

With that, we will take your questions.

## **Question-and-Answer Session**

### **Operator**

[Operator Instructions]. And first in line, we have Myles Walton with UBS.

### **Myles Walton**

Dennis or Greg, how is the 737 return-to-service effort disrupting or influencing both the 777X certification effort ongoing and then your decision on the NMA? Given that this is all hands on deck for the MAX, I imagine there's some cannibalization of resources on the 777X. And then on the NMA, how is your view on that changing given the less clear picture maybe of where the certification is or will be in the future?

### **Dennis Muilenburg**

Yes. Myles, good question. First of all, again, I want to stress and reiterate the point that we are very, very focused on the safe return to service of the MAX, and that remains our top priority. Clear focus, clear resources being applied, and daily engagement, hourly engagement by me, Greg, and the leadership team. And we're going to continue to focus there and get that airplane back up and flying for our customers.

As part of that process, we are taking a look at our certification processes. We remain confident in the fundamental processes. But as part of our continuous improvement mindset, we always take a look at opportunities to improve. So we're welcoming the government joint authorities' technical review that's been announced, and we'll be supporting that as appropriate. As you've heard earlier, I've also asked Boeing Board to stand up a committee to take a look at our certification processes and identify any potential improvements. And if we find any opportunities to improve, we will certainly adopt those on a go-forward basis.

As far as the ripple impact or potential impact of the 777X, we haven't seen any direct impact. Again, our team has been very strong about continuing to drive 777X development and performance in parallel with our return-to-flight -- or return-to-service efforts on the MAX. We've deployed our teams accordingly and make sure that we've resourced high-priority efforts on 777X. As noted earlier, we have rolled two flight test birds out of the factory, number three and number four are in the final assembly, and we look forward to getting into flight testing here this year and delivering that airplane on schedule in 2020. We do not see any changes to the underlying certification process. But again, as I said, if we find areas to improve, we will certainly adopt those.

As to your NMA question, we're continuing our work on that in parallel. Certainly, the higher priority -- highest priority for us is the 737 MAX's safe return to service. So, we have prioritized our resources accordingly while we continue to work on our NMA effort in parallel. We're still looking at that as a potential opportunity for a 2025 entry into service date. We still have work to do before we get to an authority to offer a decision. We're still working on a pace to try to do that this year, as we previously announced, but I want to be very clear that when it comes to resource questions and application of resources, our top priority is the safe return to service of the 737 MAX.

## **Operator**

Our next question is from Doug Harned with Bernstein.

## **Douglas Harned**

As you've talked about, you have a technical fix that you're testing now for the 737 MAX, and it sounds as though you have some pretty good confidence in that. If we assume that the technical solution, that, that is what is needed, that works, then I sort of look at this as three important processes here. One, you've got to work with the authorities, the airlines, the flying public to give them the confidence that the solution works. Second, you've got an operational process where you've already taken rate down but you want to be able to take that rate up very quickly as soon as the airplane can return to service safely. And then third, you have a commercial process where customers are awaiting delivery, they've been making progress payments.

And so what I'm interested in understanding is as you think of that first task, that first process, which the time line on it seems somewhat uncertain, how does that drive the way you look at different rates scenarios going forward operationally and the way your work with your customers who put money in and they've -- they're expecting to get delivery of this airplane?

### **Dennis Muilenburg**

Yes, Doug, our plan integrates across all of those dimensions as it should, because they're all interrelated. I will say on that first path, returning the airplane to service and doing so safely, just to give you a sense of the key steps to go there. As we know from the accident, investigations today have been publicly announced through the preliminary reports. Both accidents were a chain of events. We know there was one common link in that chain of events, and that was the activation of the MCAS system with erroneous angle of attack data. That's been well published. And as we said, we understand how to address that link. That's our responsibility. We own that, and that's what that software update does. We have great confidence in that software update with the more than 200 flights that occurred -- or excuse me, 135 flights that have occurred. I personally had the chance to fly on two of those flights, test and demonstration flights, and have seen the confidence in that software solution. We have tested it out and completed our engineering flight test last week.

The next step in that process will be the certification flight under the FAA's authority, and we are working with the FAA right now to prepare for that in the near term. Subsequent steps will include again bringing all of the global regulators together with the FAA's leadership to approve the return to service. So that path is a well-understood set of steps, things that are being actively worked on a daily and hourly basis, and we're going to continue to pursue that and make sure we take the time to do it right. That's the most important thing here, is to make sure we have a safe return to flight.

Once we accomplish that, then we'll have the opportunity to look at our production profiles, our delivery sequencing for our customers. As you might guess, we are in daily multiple-times-a-day conversations with our customers as well, and we regret the impact this has had to their operations. We know our customers are eager to get the MAX back into service. And we are eager, when we're ready, to get production ramp back up and provide those airplanes. So we'll be working that in a coordinated, integrated fashion. We have teams that are ready, positioned by tail number with the 737 MAXs that are already out in the fleet to get those airplanes ready and back up and flying for our customers, and we also have an integrated introduction plan including our supply chain that will allow us to pivot and move forward. So these are actions that we are taking daily, again hourly, all in a coordinated fashion. And across those three areas that you mentioned, Doug, I'm very confident that we have an integrated plan. All of this will be paced by the safe return to service of the MAX. That is our first focus.

## **Operator**

And our next question is from Ron Epstein with Bank of America Merrill Lynch.

## **Ronald Epstein**

To the extent that you can answer this, how does this happen right? I mean, this sort of seemingly sort of came out of nowhere. I mean, is there any way you can kind of give us a feeling for how did this slip through the engineering organization? How did it slip through the FAA? Can you give us a feel for that? Like I guess, that's the part that befuddles me most about all this because it doesn't seem like there was a lot of new science going on here, right? I mean 787 had been a lot of new science. This seem to be applications of existing technology to an existing platform.

## **Dennis Muilenburg**

Yes, Ron, there is no technical slip or gap here, right? Again as I mentioned, we know that both accidents were a series of events, and that is very common to all accidents that we've seen in history. And in -- what we know is that in this case, there was erroneous angle of attack information that came into the airplane from multiple causes. We know that at some point during the flight, that activated the MCAS control loss. And we know that ultimately, there were actions or actions not taken that contributed to the final outcome.

I can't really get into the details of that deep accident investigation because this is all governed by the ICAO Annex 13 process, which I know you know

well, and that is a disciplined, rigorous process that examines these accidents from every dimension to ensure that we understand them, and it's ultimately that disciplined process that has made this industry so safe. So we have been very purposeful about supporting that process, very purposeful about supporting the investigation, staying focused on safety and not speculation.

But I can tell you with confidence that we understand our airplane. We understand how the design was accomplished, how the certification was accomplished and remain fully confident in the product that we put in the field. But we also know there are areas where we can improve, and that is the source of the software update here. But there was no surprise or gap or unknown here or something that somehow slipped through a certification process. Quite the opposite. We know exactly how the airplane was designed. We know exactly how it was certified. We have taken the time to understand that. That has led to the software update that we've been implementing and testing, and we're very confident that when the fleet comes back up, the MAX will be one of the safest airplanes ever to fly.

## **Operator**

Next, we go to the line of Peter Arment with Baird.

## **Peter Arment**

Dennis, just maybe circling back to a few of Doug's question. When you're thinking about the best way you could describe kind of the regulatory discussions, are they running all at the same pace or should investors expect kind of a different path with each regulatory body? And we're thinking about the FAA or EASA or [indiscernible] in Asia?

## **Dennis Muilenburg**

Yes, Peter, we are working with the FAA and regulatory authorities around the world. And as you might guess, there are different paces and different processes in each country, but these are all running in parallel. We're working with those authorities to try to align schedules, both from a regulatory government standpoint as well as the customers that are operating in these countries around the world. As we said, we have more than 50 MAX operators today around the world, and they're all very interested in getting the airplane back up and flying. So we are coordinating across that entire network of global regulators and customers. And we're seeing the schedules, I'll say, beginning to align. There is still clearly a lot of work to go as we get through the certification. Another pacing item for us will be training and training deployment worldwide, and then alignment of all



the regulatory agencies on approval to get the airplane back up and service and back to flying. So we have a support role across all of that.

I want to complement the FAA, in particular, for their leadership and the work that they're doing across the global enterprise. As you might have seen, the FAA leader, Dan Elwell, hosted an international session with the counterparts from other regulatory agencies a couple of weeks ago. We were supportive to that meeting as well. So the FAA has been working hard to coordinate across all of the international regulators, drive alignment, answer questions and ensure that we're all in the same page going forward. It is fundamentally important here that we have an integrated plan and that we understand any questions or concerns that might be out around the world that we address those. And that, again, we focus on a safe return to service of the MAX, and I'm confident that, that coordination is happening. And I think it's fair to say we still have some work to do, but we're making progress.

## **Operator**

Next question is from Hunter Keay with Wolfe Research.

## **Hunter Keay**

Can you talk about the \$1 billion of cost that you added to the 737 block? I'm kind of curious to -- for you, Greg, to maybe elaborate a little more what's included in that. But maybe more importantly, what was not included in that?

## **Gregory Smith**

Yes, yes. So the cost to develop and test the software, its period expense was not in there as well as the related training materials associated with that. They're booked in the quarter but not in program margin. As I said, the period expense. Within the \$1 billion, really, what's taken into account there is the lower production rate. That's ultimately what's driving it, and now we'll take a little bit longer than what we originally had in the cost base, so you've got fixed cost that will be associated with that lower production rate.

But we also are holding on to headcount. Remember, we were at 52, going down to 42. We've held that headcount in factory, and what we've been doing with that is really working the jobs behind schedule and any jobs that are out of position in getting things back into position in the factory. At the same time, been working with the supply chain. So those that weren't on master schedule at 52, we are -- even though we came down, we have some of those suppliers staying at 52 in order to get healthy, get back on schedule. So when we do come back up and ramp, we're going to do it in a

very steady fashion with stability in each step along the way to ensure that we have a predictable, I'll say, production system, a healthier production system and one that we can support our customers as we go up in rate.

The other things that are within that fixed cost escalation, obviously, again, facilities, tooling and also support -- additional support for deliveries as well as pulling the airplanes out of storage that we currently have within our facility. So those are, I'd say, the bigger buckets of costs that are within there. But like Dennis said, this is day-to-day management on all aspects. So all with -- what we've been talking about is feeding into our production scenarios. And key in all of this obviously is keep all the stakeholders informed, realizing we don't have answers to some of the questions. But we've got scenarios, and we're trying to be proactive in how we address those so -- and be strategic. So again, going into the supply chain, rather than pulling everybody down to 42, let's go through and understand liquidity within each of those suppliers, where -- who needs help, who doesn't, who is on schedule, who can we use to get this opportunity to get back on schedule.

So again, being very, I'll say, specific, but it's day-to-day management. And we talked about our operating rhythm being daily. Our head of the program reports on -- daily on production health to all of us, and we've got the full enterprise support in this. I know there's a question earlier on 777X. People that are part of this process are from the company. So we're bringing people in that are experts in anywhere area that we need to support, we're bringing them in from across the whole enterprise, and we'll continue to do that until we get the airplane safely back up in the air and get our production rates back to where they were.

## **Operator**

Our next question is from Sheila Kahyaoglu with Jefferies.

## **Sheila Kahyaoglu**

I guess how do we think about the broader customer reaction to the MAX? There's been a lot of back and forth in the media. And then how do you think about a potential risk to the backlog and maybe production scenarios and risks you're thinking about there?

## **Dennis Muilenburg**

Yes, Sheila, to that point, let me take a long-term view here. We don't see any change. As you well know, we are continuously engaged with our customers. We have a ton of respect for them and how they operate. We have deep regret for the impact that this has had on their operations to

date, and we're very, very sensitive to that. And we're doing everything we can to get the airplane back up and flying and do that safely. Our customers are eager to do that as well.

I can tell you, I've personally talked to many, many of our customers. Our team, Commercial Airplanes team, Kevin McAllister, Ihssane, their teams are deployed daily, hourly, talking to customers. Our support teams are working around the world, helping them with the fleet that is currently grounded to maintain that fleet in good condition so that when we're ready, we can quickly bring the fleet back up to operating status. So we're deeply engaged with our customers. We understand their operational model. We're having discussions with them on how to best get them ramped back up and to help them during this intermediate period. And I think the collaboration, the communication, it's just been very strong. And I'm thankful to our customers. They've been working with us through this period. It's been difficult. It's been challenging for all of us, but we have a mutual respect based on the health of this industry and the important work that we do around the world. And we want to make sure we can get back up and flying safely, and we know we have some work to do to earn and reearn the trust of our customers and the flying public in particular. And so we're working with our customers in the airlines on how we can best rebuild that public trust, working with them. And engaging their pilots, for example, as they're involved in the process and our airline pilot customers who can express their views to the flying public. I think that's a big source of confidence for the future. So we're working together on that standpoint.

And then as we think about production re-ramp going forward, when we're ready, the skyline management, the delivery sequencing, how we can support our customers, get them airplanes as rapidly as we can and in the right order and sequence, that's all part of our daily integrated planning as well. And longer term, we're also deploying training packages and additional educational materials. I would call those above-and-beyond educational materials that are tailored for our various customers around the world. So that'll be a longer-term effort where we work with them on training, education as well as areas where we can help with the brand repair, if you will, in rebuilding the public confidence.

So we're working together across all of those fronts, and I'd say the relationship with our customers, the collaboration here is as strong as it's ever been. And perhaps, that's what we see in difficult times like this. We see those fundamental relationships coming to the surface, and the strength of those relationships is clear.

**Operator**

Next, we go to Rajeev Lalwani with Morgan Stanley.

### **Rajeev Lalwani**

Greg, a question for you. Can you just talk about the tools you're using to manage the tightness on cash flow over the coming quarters in regard to paying suppliers and the inventory build? And then also, what's the status of advances coming from customers? Have they stopped? Or is there any sort of requirement to return them given what's happening?

### **Gregory Smith**

Yes. No, I'd say the advances, for the most part, are coming in per schedule. And I think the thing to keep in mind there, Rajeev, is that the advances that are coming in today are really for delivery slots out in 1.5 years, 2 years from now. But it's obviously something that we're monitoring daily and working with each of our customers on. Like I said, there's daily engagement going on here on multiple fronts.

As far as what tools, again, leveraging the enterprise. So this is a One Boeing effort in what levers we have and in front of us, in what different parts of the business and recognize in short-term and long-term trade-offs here. But obviously, the company is in a very different position than it was 10 years ago. Obviously, we're a lot larger but a lot healthier in generating in the other parts of the business, outside of 737, a lot more cash. And that certainly helps us navigate this very challenging situation that we're faced with, but it's a very big difference. And remember, too, back then, we didn't have a share repurchase program. And so that is a lever for us today that we can utilize to help navigate through this, but again, not losing sight in our long-term commitment around repo.

So my point here, we've got a lot of levers. I think as we're managing this, clearly, the operating rhythm of the rest of the company remains intact. So this is -- as Dennis said, this is the priority. But the fact is meeting our commitments to all of our stakeholders and the rest of the business is also -- continue to be a big focus, and I think you've seen it in the first quarter. So we've got -- we're making decisions on a day-to-day basis, and we're running scenarios, as we talked about. We're running scenarios. So we're clear-eyed about what we know and what we don't know and the range of possibilities or outcomes and how would we manage it and how do we get ahead of it. And we're very much in a mindset of getting ahead of it and frankly playing on the side of being conservative at this point, and we will continue to do that. But again, it's a One Boeing effort and multiple points of input here but critical to making the right decisions around cash and liquidity.

## **Operator**

Our next question is from Carter Copeland with Melius Research.

## **Carter Copeland**

Just a couple of just quick cleanups, Greg, on the commentary you already had on the 37. Does the \$1 billion include any contractual remedies for delivery movements in there? And I guess just broader understanding of what you're talking about. It sounds like when you say fixed cost, you mean you've got the total internal cost to the company of keeping the 737 program resources, at least what they were, if not a little bit higher. Despite the fact that there are lower delivery, then that excess cost is really the biggest driver of the \$1 billion? Is that correct?

## **Gregory Smith**

Yes, you've got it. You've got it. And like I said, too, we are holding that headcount, which is obviously a big factor in that. And you heard me earlier talk about how we're utilizing those skills near term but also obviously thinking long term that when we go up in rate, those resources are resources that are skilled and trained in those positions within the line, so they'll go back into position and allow for a smoother rate increase with more stability. And so that's that, I'll say, investment that we're making today to ensure that we have that smooth rate increase going forward and doing that at each point of stability. So that is obviously is also a part of the additional costs that are in the block.

## **Carter Copeland**

And contractual remedies, is there anything -- any assumption for that of significance?

## **Gregory Smith**

No.

## **Carter Copeland**

Okay. And then just one quick one if I may. The -- you mentioned you had a sort of series of waypoints to evaluate. Can you give us some -- a sense of where the nearest one of those is? You start evaluating any other changes to production or anything else? Is this a sort of two, three month kind of time line? Or is it shorter, longer? Any color would be helpful.

## **Gregory Smith**

Well, look, I'd say there's waypoints daily so -- but there's some more significant ones around what Dennis talked about as return to service. That's fundamentally the biggest waypoint we have there and how that could play out, as Dennis articulated, and whether it happens at once or staggered. All of that is being considered and brought into our model and then looking at production rates, looking at the amount of aircraft that we would be parking. And we obviously want to minimize that and keep that to a minimum and obviously fully within our control. At the same time, factor the supply chain, making strategic decisions within the supply chain and not a one-size-fits-all with, again, the whole idea to keep them healthy and help support them through this period but get back on schedule for those that weren't. And we're again -- we're working hand-in-hand with each one of them, again, on a daily basis. So lots of, I'll say, small waypoints within there, but the most significant one being the return-to-service.

### **Dennis Muilenburg**

Yes. And Carter, as you look for progress points there, near term will be the certification flight. Next in line will be the actual final certification of the software and the FAA's approval and then bringing the regulatory authorities together to gain approval of return to service. So there's some interim milestones here that'll be visible that we are aiming to complete in the near term, and then that will subsequently cause the next set of activities to occur, which Greg outlined, in terms of production system and supply chain ramp-up. So this is an integrated sequence of events.

### **Operator**

And we'll go to Cai von Rumohr with Cowen and Company.

### **Cai von Rumohr**

So 787, you had a pretty spectacular \$1 billion-plus decline in deferred costs and tooling costs. How did you achieve it? And you mentioned higher 787 margins, was that a function of an increase in the block size?

### **Dennis Muilenburg**

Let me comment first and, Greg, jump in on the second part there. Cai, what you're seeing here is the investment that we've made in the 787 product and manufacturing system and our team performing successfully. So while not a lot of fan here over the last quarter, we did seamlessly transition from 12 per month to 14 per month, and I want to compliment our team and our supply chain for doing that effectively. And you see that continuing to be reflected in the program's performance -- financial performance as well as the high-quality deliveries to our customers. And I think what you also see is

the effectiveness of that product in the field with the orders volume continuing to come in from our customers. So that program is performing well in the factories, and it's performing well for our customers in the field. Greg, do you want to...

**Gregory Smith**

Yes. I mean outside of that, which frankly very much complements what Dennis said, the mix, right? I mean we're -- we've got more favorable mix. But that smooth introduction of that mix, combined with the rate increases, the supplier step-down as we move through the blocks, sky, as I talked about before, continue to play into that as well. But we didn't have any block extension in the quarter, so it's really a combination of all the efforts that Dennis and I had mentioned.

**Dennis Muilenburg**

Performance, yes.

**Operator**

Ladies and gentlemen, that completes the analyst question-and-answer session. [Operator Instructions]. I will now return you to the Boeing Company for introductory remarks by Ms. Anne Toulouse, Senior Vice President of Communications. Ms. Toulouse, please go ahead.

**Anne Toulouse**

Thank you, and good morning. Now we will continue with the media portion of today's call. For the members of the press, if you have questions after the session ends, please call our team at 312-544-2002. John, we're ready for that first question. [Operator Instructions].

**Operator**

And first in line, we have Julie Johnsson with Bloomberg.

**Julie Johnsson**

Dennis, can you just dig in a little deeper into what you're expecting the Board -- or the mission of the Board Committee and when you expect them to report on the certification process? And just to play devil's advocate, I am just wondering how meaningful this will all be if it comes -- deepen as a recertification effort for the 737. And the Board members involved are really respected leaders, but they don't have a deep aerospace background.

**Dennis Muilenburg**

Yes. Well, Julie, let me just take a half step back first and remind everyone again of the incredible importance of safety to us in our culture of driving safety and continuous improvement. That is -- that culture is what has made this industry the safest form of transportation, and that is a fundamental that we are committed to. And any time an accident like this happens, it's a very difficult situation. We have great sorrow for the families that are affected. This weighs heavily on us. This gets right to the core of who we are as a company and our focus on safety. And so what we're doing here is looking at every dimension of what we've learned and making sure that we, as part of that effort, focus on any potential process improvements that we can make. That is our duty and responsibility. So not only do we look at product and service improvements, but also, are there any process improvements that we can make?

And there's really a twofold effort here. One, the U.S. government is bringing together a joint authority review with international regulators around the world. That's been previously announced. That will take a look at certification processes. We'll support that with technical expertise, and any learnings from that, we'll incorporate. And then internally, I've also asked our Board to set up a committee that you referenced. And let me give you a little more context on that. That committee will be focused on looking at our design, development, certification processes not only for the MAX but, more broadly, for our airplane programs. It will be headed up by Edmund Giambastiani, and he does have a great deal of expertise in the aerospace sector and the defense sector, as you well know. So we're bringing sector knowledge to the table. He will be joined by Board Members who also bring expertise from other sectors who are very safety-focused and have significant government regulatory dimensions. And I think that will actually make us better because we can do cross-sector learnings, so I would argue that that's bringing in an external view that's even more helpful.

In addition, that committee has authorized to bring in outside technical support, deep support in the areas where it's required, and they will also leverage the depth of our technical resources across Boeing. So they will have a depth of capacity to do their work. And based on the outcome of their analysis and assessment, we'll determine how we roll these results into our processes. That could be a report. It could be set of actions. Rather than stating upfront what that will be, what we want to do is see what the committee learns and see the outcome of their work and then we'll decide how to implement that. But we are committed to doing a deep and rigorous evaluation and making improvements where we can. That is part of how we operate as a company. We are always looking for opportunities to improve.

## **Operator**



Next question from Phil LeBeau with CNBC.

**Phil Lebeau**

Dennis, my question is this. What is your plan or what plans are in place to reassure airlines and the traveling public that the 737 MAX will be safe to fly again once it is cleared to get back in the air? And what's your reaction when you see these reports, and you've seen them over the last couple months, where -- whether it's airline passengers or airline executives who are saying, "I'm just not sure people are going to want to fly this plane again."?

**Dennis Muilenburg**

Yes. Phil, I think that's a great question and certainly an area where we're very focused on. And this is an area where collaboration with our airline customers is extremely important, and we're working this on a daily basis. And we certainly have deep regret for the impact that this has had on our airline customers and their operations and the impact it's had on the flying public. We've got 100-plus years of history as a company on providing safe transportation, and that is a commitment that we treasure, something that we place high value on. And the respect of the flying public, the confidence of the flying public is very, very important to us. So we regret the impact that's happened here, and we're very focused on addressing that going forward.

The game plan that we've laid out with our airline customers is tailored by customer. We're talking with each of them in terms of what they're hearing from their passengers. We think a key voice in all of this will be the pilots for our airlines, and their voice is very important. That bond between the passenger and the pilot is one that's critical, and so we're working with our airline customers and those pilot voices to ensure that we can build on that going forward. To that end, we hosted multiple sessions around the world. More than 90% of our 50-plus MAX operators to-date have had pilots in our simulator sessions with the new software, experiencing that, building confidence. I can tell you with those series of sessions that we've had around the world, the pilot feedback from the simulator sessions has been excellent, and I think it's been a big part of building confidence and how we talk about this going forward. So we're planning to leverage that pilot voice. We'll be working closely on branding and talking about training and education activities going forward. This is a place where Boeing is going to make an investment. We know it's important to earn and reearn the trust, and this will be done jointly with our airline customers, the pilots, the flight crews, the flight attendants, everybody that supports these airplanes. And we know it'll take time. We have to earn and reearn the trust of the flying public, and that's work ahead of us, and we take that very seriously.

**Operator**

That will be from Eric Johnson with Reuters.

**Eric Johnson**

Dennis, there's been some calls for you to divide up your role as Chairman and CEO. As the grounding continues, would you say that your future in both roles or either role is tied specifically to the duration and outcome of the crisis and your ability to restore public trust in Boeing?

**Dennis Muilenburg**

Eric, I think it's important to look at this, again, from a long-term standpoint. As we've said in the past, as we continue to say, it's important that our company has the flexibility to have the leadership structure that works best for our company. That's been our position for years and continues to be our position, and we remain consistent on that front. And we have a great, engaged Board on this topic. The working relationships are strong. Our Lead Director, Dave Calhoun, is very engaged in the work that we're doing. The Board Committee that I talked about is just another example of a very engaged Board. I have daily communications with the Board both in my Chairman role and in my CEO role. We think that is the right, most effective structure for our company. And I think that's, again, showing it to be the case even in the midst of this challenging situation. And I also want to reiterate the fact that our Board does have a very strong, independent Lead Director and that we respect and understand those rules, and the structure that we have in place today is one that I think is healthy for our company and healthy for all of our stakeholders.