Operator

Thank you for standing by. Good day, everyone, and welcome to The Boeing Company's Second Quarter of 2018 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 Co. Ms. Sutedja, please go ahead.

Maurita B. Sutedja - The Boeing Co.

Thank you, and good morning. Welcome to Boeing's second quarter 2018 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 & Strategy.

After management comments, we will take your questions. In fairness to others on the call, we ask that you limit yourself to one question. We have provided detailed financial information in today's press release and you can follow the broadcast and presentation through our website at boeing.com.

Before we begin, I need to remind you that any projections and goals in our discussion today are likely to involve risks, which is detailed in our news release, various SEC filings and the forward-looking statement disclaimer in the presentation.

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 A. Muilenburg - The Boeing Co.

Thank you, Maurita, and good morning. Let me begin today with a brief overview of our second 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 outlook.

With that, let's move to slide 2. Thanks to the dedicated efforts of employees throughout our company, Boeing delivered strong second quarter

2018 financial results that included higher revenue and earnings and strong operating cash flow, driven by solid execution across the company.

During the quarter, we generated \$4.7 billion of operating cash and repurchased \$3.0 billion of Boeing stock. We also paid \$1.0 billion in dividends, reflecting a 20% increase in dividends per share from last year.

We continued to deliver on our commitment to returning cash to shareholders, while investing in our people, innovation and future growth.

Revenue in the second quarter was \$24.3 billion, reflecting higher volume of commercial deliveries and favorable mix, along with services and defense contract volume.

Core earnings per share of \$3.33 was driven by strong performance across the businesses, volume and mix and lower tax rate, partially offset by a write off due to the previously announced Spirit litigation outcome and cost growth on the KC-46 Tanker program, which I'll address shortly.

For the full-year, we are raising guidance for revenue to reflect higher volume at BDS and BGS. Additionally, we are adjusting BCA and BDS segment operating margin guidance. Greg will discuss these in more detail in his section.

Before we delve into the second quarter operating performance for our businesses, let me spend a minute on the KC-46 Tanker program. We continue to make steady progress towards final certification for the KC-46 Tanker and recently completed all flight tests required to deliver the first aircraft, which is expected to be in October of this year, as now agreed upon with the U.S. Air Force.

This is a significant milestone for us and our customer, representing the culmination of three years of testing and over 3,300 flight hours. However, the program did see additional costs growth in the quarter of \$334 million after-tax, primarily due to higher estimated costs of incorporating changes into six flight tests and two early build aircraft, as well as additional costs as we progress through the late-stage testing and certification process.

Regarding these flight test and early build aircraft, as flight testing to support the first delivery was completed, and final configuration of each aircraft has been defined, the plan to complete manufacturing of these eight aircraft is now clear and firmed up. While there is still a lot of work ahead of us, we now have a very clear line of sight what is needed to deliver these highly, mission-capable aircraft to our customers.

We remain confident in the long-term value of this franchise, a program that is going to have a production run measured in hundreds of airplanes and decades of follow-on support and training.

With that, now let's look at Commercial Airplanes. For the quarter, Commercial Airplanes generated revenue of \$14.5 billion, reflecting 194 deliveries, with operating margins of 11.4%. Continued healthy sales activity contributed to 239 net new airplane orders worth \$16 billion during the quarter, including 91 wide-body orders, adding to our robust backlog that stands at nearly 5,900 airplanes and is worth \$416 billion. Year-to-date, we have captured over 900 net new orders and commitments.

The 737 MAX program marked its one-year anniversary of entering revenue flight service in the quarter and its production ramp-up continued. To-date, we have delivered 162 MAX's, with 52 of them delivered in the quarter.

As for the 777X program, in the quarter, we moved the first two test airplanes into the low-rate initial production line in the main factory and we also began the systems testing for this exciting development program. We remain on track for first 777X delivery in 2020.

Now, over to Defense, Space & Security. BDS reported second quarter revenue of \$5.6 billion, reflecting the Kuwait F-18 production contract award and higher weapons volume with operating margins of 9.3%. The \$7 billion of new orders booked by BDS during the quarter demonstrates the value we bring to our customers across our Defense, Space & Security portfolio.

These orders included finalization of the production contract for 28 F-18 Super Hornets to Kuwait, an additional order for 18 F-18 Super Hornets for the U.S. Navy and three P-8 Poseidon aircraft for the U.S. Navy, as well as a multiyear contract for 58 V-22 Osprey aircraft.

Key milestones for BDS included induction of the first F-18 aircraft into the Service Life Modification program, two successful tests for the U.S. Air Force's Minuteman III, and production of the 100th P-8 aircraft. On the commercial satellites side, we successfully completed the O3b mPOWER preliminary design review with SES.

Turning to Global Services. Our integrated services business completed its first full-year of operation at the end of the quarter. BGS reported second quarter revenue of \$4.1 billion with operating margins of 14.7%, reflecting higher volume along with product and services mix.

During the quarter, BGS won new business totaling approximately \$4 billion that demonstrates the value that we bring to our broad range of commercial and government customers. These included an F-18 depot maintenance

contract for the U.S. Navy and Marine Corps, a Global Fleet Care contract for Primera Air's 737 fleet and performance-based logistics contracts to support the Netherlands' rotorcraft fleet. These orders highlight the strength of our One Boeing offerings. Additionally, BGS delivered its first 737 Boeing Converted Freighter in the quarter.

As part of our growth strategy of complementing organic investments with selected strategic acquisitions; in May, we announced our agreement to acquire KLX, a major provider of aviation parts and services.

By combining the talent and product offerings of our Aviall business and KLX, we'll provide a one-stop shop that will benefit our supply chain and our customers in a meaningful way.

Also, in the quarter, we announced a proposed partnership with Safran to jointly design, build and service auxiliary power units. This move will strengthen Boeing's vertical capabilities as we continue to expand our services portfolio and make strategic investments that accelerate our growth plans.

In summary, we delivered another quarter of strong operating performance, captured noteworthy additions to our large and diverse backlog, returned significant cash to shareholders and complemented our organic growth with planned, strategic, inorganic investments.

With that, let's turn to the business environment on slide 3. We continue to see healthy global demand in our commercial defense, space and services markets. We've recently revised the size of these growing markets upward to \$8.1 trillion over the next 10 years.

In the Commercial Airplanes market, airlines continue to report robust profits and strong passenger traffic, outpacing global GDP. Passenger traffic in 2018 grew 6.8% through May. Meanwhile, cargo traffic maintained its strong momentum, growing by 5.3% in 2018 through May, as we see trade and industrial production growing in all regions.

Our global customers continue to recognize the compelling value proposition that our new more fuel-efficient product family brings to the market, as reflected in the healthy new order intake we've seen year-to-date.

We continue to see the trend of diverse and balanced demand from a geographical perspective, as well as across the spectrum of airline business models. The changing nature of travel, with the expansion of network city pairs and rising middle-class population in emerging markets, have fundamentally expanded traffic patterns and underpinned sustained growth.

There also is more balanced demand between fleet growth and replacement of older aircraft, and we are seeing more consistent and stable customer purchasing patterns. We believe the evolution in key market dynamics, in the aggregate, is driving greater stability and far less cyclicality for our industry.

Over the long-term, we remain highly confident in our commercial market outlook, which now forecast demand for nearly 43,000 new airplanes over the next 20 years, up from our previous outlook of approximately 41,000 airplanes. This is comprised of more than 31,000 aircraft in the narrow-body market and approximately 9,000 aircraft in the wide-body market. These deliveries, of which 44% will be driven by replacement demand, will double the size of the global fleet.

This long-term demand, combined with healthy market conditions and a robust backlog, provides a solid foundation for our planned production rates.

Turning to our product segments. Starting with the narrow-body, our production rate of 52 per month starting June of this year and planned increase to 57 in 2019 is based on our backlog of nearly 4,700 aircraft and a production skyline that is sold out into early next decade. We continue to assess the upward pressure on this 737 production rate.

In the wide-body segment, we have seen steady orders for 787 and 777 airplanes and have high confidence in a meaningful increase in wide-body replacement demand early next decade.

For the current generation 777, we received 19 net new orders in the quarter, bringing the backlog to 96 aircraft. The renewed strength in the air cargo sector has provided support for the 777 bridge, as highlighted by recent orders, which included incremental freighters for FedEx and DHL. Additionally, earlier this month, we finalized Qatar Airways' order for five 777 Freighters and received a letter of intent for 29, 777 Freighters from Volga-Dnepr and CargoLogicHolding.

As we transition production to the 777X, we expect 777 deliveries of approximately 3.5 per month in 2018 and 2019, as previously announced.

As you can see from the recent activities, we continue to make good progress on the 777 bridge, and while we still have some work to do in filling the remaining 777 production slots, in particular for 2020 and beyond, based on our progress of capturing new orders and commitments, managing the skyline and working new campaigns, we continue to believe the rate plan we've put in place establishes a floor for the program and supports our production bridge from the current 777 to the 777X.

As we look forward to the 777X, we have a strong foundation of 340 orders and commitments that support our plan for ramping up production and delivery of this new aircraft.

We also captured 59 orders for the 787 Dreamliner family in the quarter, a solid platform for long-term production. With more than 650 firm orders in our backlog, our plan to increase Dreamliner production to 14 airplanes a month in 2019 is well-supported.

We continue to see repeat orders for the 787 Dreamliner, including from Qantas, Bank of China Aviation and United. These repeat orders, coupled with continuing attraction from new carriers such as Bamboo Airways' recent commitment for 20 787s, highlight the strong market preference for the 787 and its superior value.

Turning to our 747 and 767 programs. With our unmatched freighter product lines, we are well-positioned to capture the increased cargo demand.

During the quarter, FedEx announced an order for 12 incremental 767 Freighters. This further supports our 767 production rate increase from 2.5 per month to 3 per month in 2020.

We remain focused on the strong long-term aerospace industry fundamentals, as highlighted by the continued strength of traffic. It is important to have this in perspective as we navigate through global trade discussions.

As a global company with operations around the world, supporting commercial and government customers in more than 150 countries, Boeing maintained strong relationships with our customers, suppliers and other key stakeholders around the world. We will continue to engage with leaders in these countries to urge a productive dialog to resolve trade differences, highlighting the mutual economic benefits of a strong and prosperous aerospace industry.

Turning to Defense, Space & Security. We continue to see solid demand for our major platforms and programs. The final appropriation bill for fiscal year 2018 U.S. federal budget funded our key programs across our fixed wing, rotorcraft and commercial derivative aircraft and our missile, space and satellite products.

Boeing continues to see strong support for our key products in fiscal year 2019 President's budget and in Congress, including increased procurement of 110 F-18 Super Hornets across the future year defense plan and support for a fourth multiyear procurement for the F-18, and increases for various

programs in our weapons and rotorcraft portfolios. The BDS portfolio is well-positioned with mature, world-class platforms to address current needs.

International demand for our defense and space offerings remains high as well, in particular, for rotorcraft, commercial derivatives, fighters and satellites.

As I mentioned earlier, we finalized a production contract for 28 F-18 Super Hornets for Kuwait and received a multiyear contract for the V-22 Osprey, which includes four aircraft for the government of Japan.

Recently, New Zealand selected the Boeing P-8 Poseidon aircraft as its new maritime patrol aircraft. We are making progress towards completing other previously-announced international sales, including additional Chinook helicopters for Spain and Saudi Arabia.

Our investment in future growth and new sales continues in areas that are priorities for our customers, such as commercial derivatives, rotorcraft, satellites, services, human space exploration and autonomous systems.

Much of that investment supports the priority we have placed on capturing future franchise programs, where we're also leveraging capabilities and technologies from across the enterprise for the T-X trainer, Ground Based Strategic Deterrent, and the unmanned carrier-based MQ-25A along with several other important opportunities.

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 grow 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 cost through the lifecycle.

These activities stretch across BGS's four capability areas; including parts, engineering, mods and maintenance, digital aviation and analytics and training and professional services.

Our digital solutions powered by Boeing analytics provide airlines with advanced optimization and analysis, as illustrated by a recent contract from Etihad Airways to implement our crew management solutions to support the planning and operation of their 7,500 crew members. The flexibility and strength of our optimization and the crew management suite will allow

Etihad to solve complex issues with ease, and support their decision-making process with detailed quantifications of risks and costs.

Our focus remains on optimizing the businesses and expanding our portfolio offerings through organic growth investments, such as strengthening our vertical capabilities, complemented by strategic acquisitions, to position BGS for long-term sustained growth and profitable growth.

Our expertise, the global reach of our business and our strong customer partnerships have us well-positioned to compete and win in this important sector.

Before I close this business environment section, I would like to spend some time on Embraer. Consistent with our enterprise strategy of pursuing strategic investment opportunities where they demonstrate real value and accelerate our organic growth plans, earlier this month we signed an MOU with Embraer for formation of a joint venture comprising the commercial aircraft and services business of Embraer. This proposed partnership will strategically align with Boeing's commercial development, production, marketing, and lifecycle services operations, strengthen the vertical capabilities of Boeing and enhance value for our customers through industry-leading products and services.

Additionally, we will create another joint venture to promote and develop new markets and applications for defense products and services, especially the KC-390 multi-mission aircraft. This comprehensive enterprise-wide collaboration with Embraer will create the most important strategic partnership in the aerospace industry, strengthening both companies' leadership in the global market and creating more value for both companies' customers, shareholders and employees.

While this agreement is a significant step, a considerable amount of work remains. And in the coming months we'll continue to work with Embraer and its shareholders, the Brazilian government and regulators among others to complete the transaction.

In summary, with growing markets and opportunities ahead, our team remains intensely focused on growth, innovation and accelerating productivity improvement to fuel our investments in the future.

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

Gregory D. Smith - The Boeing Co.

Thanks, Dennis, and good morning, everyone. Let's turn to slide 4 and we'll discuss our second quarter results.

Revenue for the quarter was strong at \$24.3 billion, reflecting higher volume of Commercial Airplane deliveries, favorable mix, along with an increased volume at both Defense, Space & Security, as well as Boeing Global Services businesses.

Core earnings per share of \$3.33 reflect solid execution across the businesses, higher volume and improved mix, along with a lower tax rate. The results were partially offset by an after-tax charge of \$124 million related to a receivable write-off due to the previously announced Spirit litigation outcome and cost growth of \$334 million after-tax on the KC-46 Tanker program.

As Dennis mentioned, we're raising our full-year revenue guidance to reflect higher volume at Defense, Space & Security and Global Services; and additionally, we are adjusting Commercial Airplane and Defense, Space & Security segment operating margins. I'll provide more details on our 2018 outlook further in my remarks.

Now let's discuss Commercial Airplanes on slide 5. Our Commercial Airplane business revenue increased to \$14.5 billion during the quarter reflecting higher deliveries and improved mix.

BCA operating margins increased to 11.4%, driven by strong operating performance on production programs, higher 787 margins and timing of some period expense, partially offset by a \$307 million pre-tax charge on the KC-46 Tanker program. Second quarter BCA operating margins excluding the Tanker charge were 13.3%.

BCA captured \$16 billion in net orders during the second quarter and the backlog remains very strong at \$416 billion and nearly 5,900 aircraft equating to approximately seven years of production.

On the 787 program, we delivered 38 aircraft and booked 59 net orders in the quarter; and additionally, we extended the 787 accounting block by 100 units. This resulted in higher margins on the program and, therefore, moderated the decline of deferred production balance this quarter. The overall cash profile of this program continues to improve through the improved mix, supplier step-down pricing and our team's day-to-day focus on improving 787 profitability and cash generation.

Let's now turn to Defense, Space & Security results on slide 6. Second quarter revenue increased to \$5.6 billion, driven by F/A-18 production contract award for Kuwait and higher weapons volume.

BDS margins of 9.3% reflected our continued focus on productivity and execution, offset by \$111 million pre-tax charge on the KC-46 Tanker

program. Second quarter BDS operating margins excluding the Tanker charge were 11.2%.

During the quarter, BDS won key contract awards worth \$7 billion and our backlog stands at \$52 billion with 35% of that from international customers.

Turning now to Boeing Global Services results on slide 7. In the second quarter, Global Services revenue increased to \$4.1 billion, reflecting higher volume, predominantly driven by increased parts sales.

Year-over-year growth of 15% for the quarter and 11% in the first half of the year more than meets our objective to outpace the average annual service market growth rate of 3.5%.

BGS operating margins were solid at 14.7%, reflecting ongoing productivity efforts, as well as mix of products and services in the quarter.

During the quarter, BGS won key contract awards worth approximately \$4 billion and our backlog now stands at \$20 billion. This month marked the one-year anniversary of the launch of Boeing Global Services business and we're proud of the team's accomplishments.

BGS results year-to-date are a testament to the team and the enterprise focus on achieving top-line growth, while maintaining disciplined execution. The key wins this year underscore the strength of the One Boeing offering to our customers.

Let's now turn to cash flow on slide 8. Operating cash flow for the second quarter was strong at \$4.7 billion, driven by planned higher Commercial Airplane rates, stronger operating performance across the business and timing of receipts and expenditures.

Year-to-date, cash flow remained strong at \$7.8 billion. We remain focused and on track with our balanced cash deployment strategy. In the second quarter, we repurchased \$3 billion of Boeing stock and paid \$1 billion in dividends, reflecting a 20% increase in dividend per-share from last year.

We continue to anticipate completing the remaining \$12 billion repurchase authorization over the next 18 months to 24 months. And since the end of 2012, we returned more than \$48 billion to our shareholders through dividend and share repurchase.

At the same time, we've invested more than \$30 billion in key strategic areas to ensure long-term sustainable growth for Boeing and our customers. We remain committed to returning approximately 100% of free cash flow to investors, while continuing to invest in future growth opportunities.

Let's move now to cash and debt balance on slide 9. We ended the quarter with nearly \$10 billion of cash and marketable securities, lower debt levels and stable credit ratings. Our cash position continues to provide us with the flexibility to invest in innovation and profitable growth opportunities while again returning value to shareholders.

Turning now to slide 10. And we'll discuss our outlook for 2018. For full-year guidance, we're raising revenue guidance by \$1 billion to now be between \$97 billion and \$99 billion from our prior guidance of between \$96 billion and \$98 billion. The increase in revenue reflects the growth from key international fighter awards and higher weapons revenue for BDS and higher parts revenue for BGS.

As a result, we're increasing guidance by \$500 million to be between \$22 billion and \$23 billion for BDS and between \$15.5 billion and \$16 billion for BGS.

We're also updating full-year BCA and BDS segment operating margin guidance to reflect BCA's strong performance and cost growth on the KC-46 Tanker program this quarter.

BCA margin guidance is increased to now be greater than 11.5% from our prior guidance of approximately 11.5%, again reflecting strong performance and offsetting the growth on the Tanker program this quarter.

BDS margin guidance is reduced to now be between 10% and 10.5% from our prior guidance of approximately 11%, again primarily due to reflecting of the impact of the KC-46 Tanker growth.

The rest of the full-year guidance including EPS, cash flow and aircraft deliveries remain unchanged and by holding EPS and cash flow guidance we are absorbing the impact of the Tanker cost growth and Spirit litigation charge, offsetting that with performance.

As we look toward the remainder of the year, we remain focused on strong execution, including development programs and risk mitigation within our company and throughout our supply chain.

So in summary, our core operating engine continues to deliver strong results. We will continue to use our three-business-unit strategy as a key differentiator in the marketplace, make prudent investments and leverage talent and innovation across the company.

At the same time, we'll set challenging goals and objectives around elements of operation and support functions tied to profitability and efficiency to generate cash and improve working capital, while delivering value to our

customers. All of these will help us achieve our goal to grow year-over-year revenue, cash flow and margins.

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

Dennis A. Muilenburg - The Boeing Co.

All right. Thank you, Greg. With a strong couple of quarters providing solid momentum for the year, our team remains focused on further driving both growth and productivity.

We wouldn't have been able to achieve these strong results without the hard work and dedication of our employees and the great partnership we enjoy with our customers and suppliers.

In addition to the strong Commercial Airplane market dynamics I mentioned earlier in my remarks, we have taken our own actions to reduce cyclicality in our business. This includes remaining disciplined in our production rate decisions, de-risking our pension liabilities, strategically phasing our research and development spending, creating labor stability with long-term contracts, and expanding our services business, which is also less cyclical.

We've executed on our long-term strategy of robust and continuing organic growth investment in returning value to shareholders, complemented by strategic acquisitions and partnerships that enhance and accelerate our growth plans. The recently-announced planned strategic partnerships with Embraer and Safran and agreement to acquire KLX Aerospace are entirely consistent with this strategy.

As the world's largest aerospace company spanning Commercial, Defense, Space and Services, we are as optimistic about our future and the future of our industry as we have ever been.

Our priorities, going forward, are to leverage our unique One Boeing advantages, continue building strength on strength to deliver and improve on our commitments and to stretch beyond those plans and sharpen and accelerate our pace of progress on key enterprise growth and productivity efforts.

Achieving these objectives will require a clear and consistent focus on the profitable ramp-up in Commercial Airplane production; continuing to strengthen our Defense and Space business; growing our integrated services business and leveraging the power of our three business unit strategy; delivering on our development programs; driving world-class levels of productivity and performance throughout the enterprise to fund our investments in innovation and growth; disciplined, leading-edge investments

and balanced value-creating cash deployment; and continuing to develop and maintain the best team and talent in the industry, all of which position Boeing for continued market leadership, sustained top and bottom line growth, and increasing value for our customers, shareholders, employees and other stakeholders.

With that, we'd be happy to take your questions.

Question-and-Answer Session

Operator

As a reminder, in the interest of time, we are asking that you limit yourself to one single-part question. First, we'll go to the line of Peter Arment of Robert W. Baird. Your line is open.

Peter J. Arment - Robert W. Baird & Co., Inc.

Thanks. Good morning, Dennis, Greg.

Gregory D. Smith - The Boeing Co.

Hey.

Dennis A. Muilenburg - The Boeing Co.

Hey. Good morning, Peter.

Peter J. Arment - Robert W. Baird & Co., Inc.

Dennis, could you address the kind of the supply chain readiness, I guess, particularly on the narrow-body side? Some of the comments coming out of Farnborough is that the engine OEMs are still studying these higher rates and they don't seem to be ready to committing to them yet. Maybe if you could just give us some color. And do you still need that 18-month to 24-month kind of lead time to make a right decision? Thanks.

Dennis A. Muilenburg - The Boeing Co.

You bet, Peter. Hey, first of all, very important that we continue to work with our supply chain on our overall production ramp-up. So, as I mentioned in my comments, we've just moved to 52 a month on the 737 line, as of June. We're still planning to ramp-up to 57 a month next year, and as I've mentioned in my comments, we continue to see upward pressure from the marketplace. We are selling and filling skyline out in the 2023 and beyond timeframe.

Now in our current production system, while we see challenges and you've heard from our supply chain on some of the pressure points, things like fuselages and engines, which are well acknowledged and those are items we work on a day-to-day basis, we're continuing to ramp-up our supply chain and it's healthy and we're meeting our customer delivery requirements. And I think that's the key as we're continuing to hit on deliveries.

And as we contemplate future rate increases, we're going to continue to look at the supply chain in an integrated manner. And there are no doubt pressure points as we ramp-up, that's why we need to continue to be very deliberate, very disciplined in these decisions. We've done that. We've done more than 20 rate breaks since 2010, so we know how to do this. We're going to continue to apply that same disciplined approach. But I will say that the market pressures indicate upward pressure, and as we approach our decision points with the lead times as you outlined, we'll do that in a very deliberate and disciplined manner.

Operator

Next, we have the line of Sheila Kahyaoglu with Jefferies. Your line is open.

Sheila Kahyaoglu - Jefferies LLC

Good morning, everyone.

Gregory D. Smith - The Boeing Co.

Good morning.

Dennis A. Muilenburg - The Boeing Co.

Good morning.

Sheila Kahyaoglu - Jefferies LLC

Can we talk about commercial aircraft profitability? Given margins excluding the Tanker costs were over 13%, so maybe could you talk about the moving pieces as we move through the remainder of the year?

Gregory D. Smith - The Boeing Co.

Yeah, Sheila. Well, I mean, to-date, you've seen improvement kind of across the board on the production programs and obviously with the block extension on the 787, we've seen the results of that this quarter. And going forward, you're going to continue to see a lot of productivity efforts across the programs, but you're going to see some shifts in period expense, in particular, R&D.

So, we'll have some more R&D in the back half and I think of that as just timing, primarily driven by 777X. And then, we've also got some investments that we're making around productivity in the back half that aren't reflected in the first half.

So, I'd say, those are the big moving pieces, but we're seeing obviously great performance across the board. Obviously a lot of focus, in particular, around taking best practices across the enterprise, and bringing them not only to Commercial Airplanes but across all of the portfolio. So there's a lot more, I'd say, One Boeing effort going on leveraging best practices and we're going to continue to do that as we strive to increase margins and cash flow going forward as Dennis and I have articulated.

Operator

Next, we have the line of Seth Seifman of JPMorgan. Your line is open.

Seth M. Seifman - JPMorgan Securities LLC

Thanks very much, and good morning.

Dennis A. Muilenburg - The Boeing Co.

Good morning.

Seth M. Seifman - JPMorgan Securities LLC

I wonder. Good morning. If you guys could talk a little bit about the cash flow profile of the Tanker program from here and maybe thinking about a couple of the different elements, including any additional cash that might be needed on other aircraft that are in inventory beyond the ones that you mentioned? Any penalties that the Air Force might be entitled to, along with on the positive side the inventory reduction that comes from the deliveries?

Gregory D. Smith - The Boeing Co.

Yeah, I'd say, Seth, obviously Tanker is going to continue to improve the cash profile going forward as we make more progress and then reach the milestones that Dennis articulated in the first delivery, there being in October. So, we've got a number obviously of aircraft in work now and as we deplete that inventory and start delivery, you'll see improved cash in the years to come. So, it won't be anything near-term, everything has been contemplated on the near-term for the balance of this year. But even as we talked about cash flow growing going forward, this is a key element of that, but not a significant moving piece when you think about the broader, I'll say cash levers of the company.

Dennis A. Muilenburg - The Boeing Co.

And, Seth, just to add a little more color on Tanker itself, I think a key thing to note, again in the quarter as I mentioned, while we took the charge on those early-build aircraft and flight test aircraft, I think, it's very important to note the milestone we achieved in the quarter of completing all of the flight testing associated with first delivery, getting all of our artifacts submitted for final certification, and getting crystal clarity on what is left to build out these aircraft. So, we have a known configuration, flight testing is completed. Now, we need to finish the work to get to delivery and that'll produce the results that Greg mentioned.

Operator

And next, we have the line of Rajeev Lalwani of Morgan Stanley. Your line is open.

Rajeev Lalwani - Morgan Stanley & Co. LLC

Hi, Dennis. Hi, Greg.

Gregory D. Smith - The Boeing Co.

Good morning, Rajeev.

Rajeev Lalwani - Morgan Stanley & Co. LLC

Just given, staying on the Tanker, obviously, you've had some challenges on the program, you've managed them reasonably well; but as we look forward to the 777X and maybe the NMA, what are you doing to just de-risk those programs so that you don't have similar obstacles like you did on the Tanker? Is it more of a digital approach? Or are you trying to manage a timeline a bit? Just some color there to help us get comfortable with any risk going forward?

Dennis A. Muilenburg - The Boeing Co.

You bet. Yeah, Rajeev, on that we've got a very focused effort on enterprise development programs and lessons learned and learning from each of the programs as we execute them. And while Tankers had its challenges, we have learned a lot through that process, especially in our commercial derivative lines and how we do development programs that span our commercial production, and military certification requirements. Tanker was especially complex because of the multiple certifications required both commercial and military. That's not a complexity that we have on a product like 777X or NMA.

That said, several lessons learned. One includes digitizing our engineering at a more detailed level upfront. This is the model based engineering initiatives that we have underway, as an example.

Also, more significant investments in system integration labs upfront to derisk development and eliminate downstream discoveries, and that's been very effective for us on 777X, and also some of the early prototyping in the production systems, again to de-risk key areas as we move into the production flow. And we're seeing that reflected again on 777X as the first two airplanes have now moved into the low-rate initial production line.

All of these early de-risking steps are showing up in a positive way on 777X and we're going to be keeping a close eye on that as we build-out the flight test aircraft and move into flight test; but given that we're into the heart of 777X right now, we've got a healthy development program on track to deliver on 2020 as scheduled. We're seeing clear signs of improvement in our overall development program process.

So, that's our headset going forward and we'll continue to learn. I think this is one of the benefits of our phased R&D approach. Rather than doing multiple development programs in parallel, we're now doing a much more sequential approach, so that we can learn program-to-program and continue to reduce risk going forward.

Operator

Next, we have the line of Hunter Keay of Wolfe Research. Your line is open.

Hunter K. Keay - Wolfe Research LLC

Hey. Thank you. Good morning.

Gregory D. Smith - The Boeing Co.

Morning.

Dennis A. Muilenburg - The Boeing Co.

Hi, Hunter.

Hunter K. Keay - Wolfe Research LLC

Hey. So, you talked about mix driving some pressure on BGS margins and I think you called out parts sales as a driver of the top line.

Gregory D. Smith - The Boeing Co.

Yeah.

Hunter K. Keay - Wolfe Research LLC

As we learn more about this business, what are some of the moving parts that help and hurt mix there that we should think about going forward and whether that's like by end-market or contract type? And the second part of the question is, as the business fills up, would you may be willing to trade a little bit of margin for some top line opportunities? Thanks.

Gregory D. Smith - The Boeing Co.

Yeah, Hunter, you're right. I mean, it's a very different portfolio than the other businesses, so you're dealing with thousands of contracts and a couple million different, I'll say, kind of offerings through parts or other services.

So with that, just the nature of that business, you're going to end up with some ebbs and flows quarter-to-quarter depending on how that mix plays out.

So, the portfolio is very different obviously and that's going to drive some of that change; but beneath that, the focus continues to be on core operating performance, the cost structure, the working capital around that business. So that engine is going to continue to run quarter-over-quarter, week-afterweek, month-after-month, but you are going to end up seeing these movements quarter-to-quarter.

But end objective, grow the business as we've talked about a lot, at the same time grow the bottom-line and expand margin, and that's the underlying objective of this business and ultimately, we think we can serve our customers much better in doing that.

Dennis A. Muilenburg - The Boeing Co.

We're staying very focused on our overall effort to drive to mid-teen margins across the entire business and so to your last part of your question, Hunter, on margin growth and BGS, we expect margins in BGS to be accretive to our overall enterprise margin, so this is all about profitable growth.

Operator

Next up, we have the line of Carter Copeland of Melius. Your line is open.

Gregory D. Smith - The Boeing Co.

Carter, we can't hear you.

Carter Copeland - Melius Research LLC

Wow. This is leaving mute on two days in a row. I'm losing my skills. Sorry, guys. Just a quick clarification and a question on expanding on what Seth asked.

Greg, can you confirm if the 787 unit versus program was positive or negative in the quarter? And then just on this whole Tanker cash flow, just because the size of the charge and how we should think about impacting the cash, are the terms of payment with the customer on that payment upon delivery of the aircraft or milestone-based ahead of that? Thanks, guys.

Gregory D. Smith - The Boeing Co.

Yeah, they're milestone-based, performance milestone-based. And with regards to the 787, we did see, obviously, we saw unit improvement this quarter across-the-board.

Operator

And next up, we have the line of Doug Harned of Bernstein. Your line is open.

Douglas Stuart Harned - Sanford C. Bernstein & Co. LLC

Good morning. Thank you.

Gregory D. Smith - The Boeing Co.

Hey, Doug.

Douglas Stuart Harned - Sanford C. Bernstein & Co. LLC

I know at Farnborough, you got a number of 777 orders and can you help us understand where you stand on filling the bridge to the 777X? And then perhaps give us a sense of what you think that 777X ramp will look like, given the planned entry into service in 2020? And along with that, just when you expect we'll likely see more orders for the 777X rather than just the 777?

Dennis A. Muilenburg - The Boeing Co.

You bet. Hey, Doug. Great question. The key thing on 777 is, we've seen very strong recovery in the Freighter market, in particular, and you see that in the demand and recent orders. We've got 24 new orders year-to-date for 777s through the end of the second quarter. Since the end of the quarter, an

additional five from Qatar, 777 Freighters. So, year-to-date, 29 new orders for 777s.

Beyond that, we have the additional announcements that have been recently made, including the letter of intent from Volga-Dnepr for 29 777s. We continue to have a number of other campaigns underway as well. So, you really see the strength of the market there continuing to build our confidence in filling out the bridge.

As I said, we're really now focused on skyline slots 2020 and beyond. We still have work to do, but our confidence continues to grow based on recent sales successes and what we see as sustained growth in the Freighter market.

Now, as we look beyond that and headed towards 777X development, I think a key fact for you is, today, we have 340 orders and commitments in place for the 777X. For the Dash-9 variant of that, we have 273 orders of those 340 orders. And if you want to compare that to where we were at the same time on the 777-300ER back when it was introduced, at that same point in time, relative point in time, we had 70 orders. So 273 orders versus 70 orders. That should give you a sense of the confidence we have in the backlog for 777X.

Now, we still continue to have additional campaigns and high interest in the 777X, but we're in very good shape as we look at our production pipeline and backlog position to ramp up successfully on the 777X. So, the key focus now is move into flight test on the 777X, finish out the current 777 bridge, where we have growing confidence again, and then get to EIS for 777X in 2020.

And I would say all of the dimensions of that puzzle continue to firm up and we're seeing growing confidence, and that's why the production rate plan we've put in place, we see that as a very clear floor for the production program, and we look forward to moving into the 777X.

Operator

Next in queue, we have the line of David Strauss of Barclays. Your line is open.

David Strauss - Barclays Capital, Inc.

Thanks. Good morning, everyone.

Gregory D. Smith - The Boeing Co.

Morning.

Dennis A. Muilenburg - The Boeing Co.

Good morning.

David Strauss - Barclays Capital, Inc.

I wanted to ask about cash flow. So, I think, Greg, you talked earlier about earlier in the year that you saw prepayments as relatively neutral for the year. I think year-to-date, we're running at \$3 billion. Are you expecting those to reverse as we go through the second half?

And then, second part on inventory, it looks like ex the drawdown in 787 deferred, you've had about \$1 billion inventory build this year. Is that 777X? Or is that just related to the 37 ramp? Any color there. Thanks.

Gregory D. Smith - The Boeing Co.

Yeah, the inventory is a little bit of both, David. Obviously, 777X inventory being the biggest driver and will continue to be through the balance of the year and into next year.

With regards to the advances, yeah, you're absolutely right. I mean, they move around quarter-to-quarter depending on the PDP schedule, so we've seen some this year more front-loaded than we will in the back half of the year, and we've taken that into consideration with the guide.

Operator

Next in queue, we have the line of Ron Epstein of Bank of America. Your line is open.

Ronald J. Epstein - Bank of America Merrill Lynch

Yeah, hey. Good morning, guys.

Gregory D. Smith - The Boeing Co.

Thank you, Ron.

Dennis A. Muilenburg - The Boeing Co.

Hi.

Ronald J. Epstein - Bank of America Merrill Lynch

I think at Farnborough, Dennis, you mentioned on the 797, I think, the quote is, "We want to be in the 2025 window with maybe a 2019 launch". When we think about the 79 or the middle market, whatever it's going to be, maybe, should we start – in our financial forecast start building in something for that? Because it seems like the drumbeat is really gaining momentum. And then, the second part of the thing would be, when we think about it, is it a wide-body? Is it a narrow-body? I mean, where are you guys on that now?

Dennis A. Muilenburg - The Boeing Co.

Yeah, Ron. First of all, as you know, we haven't made a launch decision, but we continue to look at the middle of the market airplane. And as you heard at Farnborough continue to have very productive customer discussions on that topic. We do see a marketplace where for 4,000 aircraft to 5,000 aircraft and we're very focused now on deliberately going through our business case to make a good launch decision.

We are protecting 2025 as the entry into service date that aligns with our customers' needs and desires. So, we're doing the appropriate long lead work to protect that delivery date and we're looking at making a launch decision in 2019.

And again, we're going to be very deliberate about that and make sure business case that makes good, solid sense and that's our headset going in. So, we're not going to predetermine the answer there. We're talking to our supply chain and we're taking a look at every dimension of the program and we've got to look at this through a lifecycle lens both in airplane and downstream services and make sure we're producing value for customers. So, that's our headset.

And in terms of your question about wide-body or narrow-body, again as we look at configuration options and details and begin firming that up, what we're hearing from customers is we need something that has the comfort and twin-aisle benefit of wide-bodies but has narrow-body economics. And that's frankly the challenge of closing the business case, and it goes back to all the work we're doing on transforming our enterprise to drive efficiency in development production and support.

And if we build the confidence and the data we need to make a business case that closes, we'll launch and if we don't, we'll continue down the path with our current product lines.

Ronald J. Epstein - Bank of America Merrill Lynch

Okay. Great. Thank you.

Operator

Next, we have the line of Robert Spingarn of Credit Suisse. Your line is open.

Robert M. Spingarn - Credit Suisse Securities (USA) LLC

Good morning.

Gregory D. Smith - The Boeing Co.

Good morning, Rob.

Dennis A. Muilenburg - The Boeing Co.

Good morning.

Robert M. Spingarn - Credit Suisse Securities (USA) LLC

With your very strong margins at BCA, especially ex that charge, clearly, you've done a lot with costs, you're going to continue to do that, but I wanted to ask about the pricing side of the equation, especially in the context of Airbus comments last week at the show about pricing opportunity, given the scarcity of slots. So, I know, you have to balance that against higher rates, but how should we think about pricing over the next few years?

Dennis A. Muilenburg - The Boeing Co.

Well, Rob, when we take a look at that, first of all, I think it's important to note that pricing is holding up. It's driven by a number of different parameters, includes supply versus demand as you're pointing out, but it's also value that we generate for our customers and making sure that that value proposition is clear. So, everything we do on the pricing front is looked through that customer value lens and that's our focus. And the fact that pricing is holding up and you can see that reflected in our performance is a good sign of the unique value that our product lines are delivering for our customers.

I will say as you look across our narrow-body and wide-body product lines, it's very clear that our products deliver operating cost advantage and value advantage for our customers, and that's a key part of our equation going forward.

We're also keeping in mind the fact that we have this enterprise-wide global support and services capability. So, in many cases, we think about pricing, we're looking at it holistically across airplanes and services, which I think is a unique part of the Boeing value proposition.

Robert M. Spingarn - Credit Suisse Securities (<u>USA</u>) LLC

Between the pricing and the cost element, do you have a sense of when you can hit this 15% type margin at BCA?

Dennis A. Muilenburg - The Boeing Co.

Well, as we said we're driving towards that mid-teen margin by the end of the decade. That's been our objective. You can see the progress we're making, and as we mentioned before, we expect it to be continuing incremental progress. There's not going to be a big step function or a hockey stick. It's continuous, focused, incremental performance and I think as you can see in our data, Rob, you see the core BCA margins minus the Tanker charge up over 13%. That ought to give you a good indicator of the progress that we're making.

Robert M. Spingarn - Credit Suisse Securities (USA) LLC

Yeah.

Dennis A. Muilenburg - The Boeing Co.

We are going to be relentless on this focus and it's really about driving out cost, driving productivity, working with our supply chain, and being diligent about our production rates.

Robert M. Spingarn - Credit Suisse Securities (<u>USA</u>) LLC

Thanks, Dennis.

Operator

Next, we have the line of Noah Poponak of Goldman Sachs. Your line is open.

Noah Poponak - Goldman Sachs & Co. LLC

Hey. Good morning, everybody.

Gregory D. Smith - The Boeing Co.

Morning, Noah.

Dennis A. Muilenburg - The Boeing Co.

Hey.

Noah Poponak - Goldman Sachs & Co. LLC

Greg, was the 787 cash unit margin up or down in 2Q versus 1Q? And then any willingness to even if in a wide range kind of give us an indication of where you've taken that to. And then similarly, on the program accounting margin, on the program even if in a wide range maybe help us out on how big of a change you made on it?

Gregory D. Smith - The Boeing Co.

Yeah, Noah, I mean, I think overall you're seeing 787 improvement like I said across the board. As you look at kind of the big levers and the cost structure there that we've talked about, the mix improving, the overall productivity unit-over-unit in our factories and again really leveraging the best practices, looking at the commonality between a 9 and a 10, and I'll say kind of how that improves productivity in our factory and in our supply chain is pretty significant, combined with the supplier step-downs that we have in place contractually.

And again, our own focus internally and even going out into the supply chain, taking our productivity where we've been successful in areas of productivity and bringing that out to the supply chain to help the overall program improve.

So, I wouldn't say it's one thing, Noah. It's many levers that we're working on and trying to pull and you're seeing that in the unit margin and the overall cash profile of the program.

And as we've said a number of times, I mean, the way the team looks at this, the way we look at it is unit-over-unit, what do we need to do to improve and be even more competitive in the marketplace and how do we leverage the best practices within our factories, combined within services, between defense-based security, and in commercial and also within the supply chain. So that's been I'll say the cadence and the level of effort that's been going on and that's going to continue.

And like I said, you're seeing that in the overall cash profile of the program, improving, combined with going up in rates very smoothly and getting that Dash-10 into the production system smoothly where we're going to deliver approximately 14 aircraft this year, Dash-10s. Very, very smooth introduction, and that really goes to the commonality of that design versus Dash-10 and the team's relentless focus on ensuring that we get that into the hands of the customer on-time, minimized risk. Somebody asked about risk earlier on. It's a great example of de-risking how we bring up a derivative program into the production system. So, point is, a lot of different things, but you're going to see that continued effort going forward on this program and all the other ones.

Noah Poponak - Goldman Sachs & Co. LLC

Appreciate that color. Any ability to give us a sense of where the program accounting margins sits at this point?

Dennis A. Muilenburg - The Boeing Co.

Well, it's improved, obviously, with the block extension, that helped and, again, if you go out in that further block you're seeing favorable mix, pricing, and supplier obviously step-down along with our own productivity. So, as we March through time, you're going to see an improvement overall to that margin incrementally as we move forward in those blocks. But like I said, here day-in and day-out, it's about unit performance, meeting our targets, utilizing all our working capital initiatives, and in all of our productivity, but we're focused. Unit-over-unit, ultimately will translate into program margin.

Noah Poponak - Goldman Sachs & Co. LLC

All right. Thank you.

Operator

Next, we have the line of Sam Pearlstein of Wells Fargo. Your line is open.

Samuel J. Pearlstein - Wells Fargo Securities LLC

Good morning.

Gregory D. Smith - The Boeing Co.

Hey, Sam.

Samuel J. Pearlstein - Wells Fargo Securities LLC

I was wondering if you could talk a little bit more about, you mentioned the joint venture with Safran and APUs and I guess I'm trying to think about how do you balance the spend on a new plane with some of the significant nonrecurring engineering in areas like nacelles, APUs, maybe even avionics that takes place. And that's typically borne by suppliers and how does that factor into your thinking about potentially launching a new plane?

Dennis A. Muilenburg - The Boeing Co.

Yeah, Sam, we figured that into our overall organic investment profile and that phased R&D plan that I mentioned earlier, and as part of our organic investment we're very focused on a few key verticals. We don't need to be

vertical everywhere, but there are a few areas where when we look through a customer value lens, it's clear that we can add value.

The work on APUs with Safran is one of those areas. You mentioned avionics. It's another area. Interiors is another area, we've looked at where we've announced a joint venture with Adient. So, those are very targeted areas, well-known investments.

As part of our organic profile, those have been feathered in with our broader R&D investments in new platforms and product lines, including things like the 777X and some of our new defense products and services.

So, that's all part of an integrated R&D plan. And the way we've laid that into the profile is done in a way to ensure synergy between our verticals that we're building and our future platform products, and it's important that we do that in a synergistic way.

So, I would view that as an integrated organic investment plan, not something where we're trading verticals or platforms. It's doing it together with an eye towards creating value for customers, and then where it makes sense, we augment that with inorganic investments.

That cash deployment strategy remains constant. And as we talked about, while we make those organic and inorganic investments, we've also committed to returning 100% free cash flow to our investors, and that commitment remains solid.

Maurita B. Sutedja - The Boeing Co.

Okay. Operator, we have time for one more analyst question.

Operator

Thank you. Next, we'll go to the line of Ken Herbert of Canaccord. Your line is open.

Ken Herbert - Canaccord Genuity, Inc.

Hi. Good morning, everybody.

Gregory D. Smith - The Boeing Co.

Morning.

Dennis A. Muilenburg - The Boeing Co.

Good morning, Ken.

Ken Herbert - Canaccord Genuity, Inc.

Hey, Dennis and Greg. I just wanted to follow-up, Dennis, on your comments earlier specifically on, as you look at everything now much more with a lifecycle lens, I'm just curious on the NMA, assuming you move forward there, how does that lens impact your analysis of the business case in terms of the market opportunity?

And then second, and maybe more importantly, how that might potentially impact your go-to-market strategy as you obviously have opportunities now to capture economics in a much broader range. I'm just curious, if you can provide any more detail as to your thinking around that and how it might specifically get applied or used around the NMA.

Dennis A. Muilenburg - The Boeing Co.

Yeah, well, in particular, as we look at the business case for NMA, as I said, we're looking at it both from an airplane and downstream services standpoint, so an integrated lifecycle view, again, where can we create value for customers? And depending on the customer set, there's a different value proposition for different airlines.

In some cases, we can reduce operating costs. In some cases, we can help them reduce capital investment costs. So, we're factoring that entire equation into our business case. It does give us more parameters to look at. It gives us more ways to construct a business case for the future, and taking that holistic lifecycle view, just gives us a more robust business case.

It also, as you pointed out, will affect our potential go-to-market approaches, again, how we can tailor a value proposition for different customers. And it will drive different ways of how you might design such an airplane. Again, from the start, thinking about digital solutions and the architecture of the airplane, so that it can enable optimized services for customers. So, it's not only something that factors into the business case, it also affects how we would design the airplane.

So all of that is being done in our business case analysis. And I'll go back to my earlier point that it's important that we get it right, and we're going to take the time to get it right. We're protecting the EIS date for our customers at 2025, and if we decide to launch this development program, the R&D profile would be on the back side of 777X, so it would feather in nicely and be consistent with our overall cash flow priorities.

Operator

And that does complete the analyst question-and-answer session for this morning. I will now return you to The Boeing Company for introductory remarks by Mr. Phil Musser, Senior Vice President of Communication. Mr. Musser, please go ahead.

Phil Musser - The Boeing Co.

Thank you very much, operator. We'll continue now with media questions for Dennis and Greg. If you have any questions following this part of the session, please contact our Media Relations team by e-mail or at 312-544-2002.

Operator, we're ready for the first question, and in the interest of time, we ask that you limit everyone to just one question, please.

Question-and-Answer Session

Operator

Certainly. And our first question comes from the line of Julie Johnsson of Bloomberg. Your line is open.

Julie Johnsson - Bloomberg LP

Hi. Good morning, everyone.

Gregory D. Smith - The Boeing Co.

Hi.

Dennis A. Muilenburg - The Boeing Co.

Good morning, Julie.

Julie Johnsson - Bloomberg LP

Hey. Just to circle back on narrow-body rate, it seems to me that Boeing is taking sort of a more cautious or measured approach to evaluating rate increases into the 2020s, while your competitor is talking about rate 70 or even rate 75. I'm just wondering if the supply chain can actually support the rates that Airbus has been publicly mulling. And if they move forward, is Boeing going to have to keep pace, especially given the very strong demand environment?

Dennis A. Muilenburg - The Boeing Co.

Yeah, Julie, let me provide some additional perspective on that. Again, we're going to be very focused on being disciplined about our rate decisions and our production ramp up.

We've got important work ahead of us. We've just moved to 52 a month on the 737 line. We're going to move to 57 a month next year. As we said the market pressures do indicate upward pressure on that rate. That's a challenge, but it's a good challenge to have, but at every one of these steps we're going to bring our entire supply chain along and I think you see that reflected in our performance.

We're continuing to meet our delivery commitments to our customers. That's the lens that we put on these production rate decisions. We see pressure points in the supply chain. We work those on a day-to-day basis and we're very focused on maintaining our discipline. And we'll make rate decisions not only informed by market pressures, but informed by our ability to execute them successfully, and I think our track record of doing 20 successful rate breaks over the last several years speaks to our approach.

And while I can't comment on our competitor's approach, what I can comment on is our disciplined approach. We're going to maintain that approach. We're working very closely with our supply chain to bring them along in an integrated fashion. That'll continue to be our focus going forward.

Operator

Next, we have the line of Brian Sozzi of TheStreet. Your line is open.

Brian Sozzi - TheStreet

Hey, guys. Good morning. Thanks for taking the question.

Gregory D. Smith - The Boeing Co.

Hey, Brian.

Brian Sozzi - TheStreet

Dennis, since the last time we talked we got the Space Force announcement and I'm curious how you're thinking about it and what type of dollar impact could that potentially new program mean to a Boeing? And then on the Services business real quick for you guys, are you planning to get more aggressive on acquisitions there to build that out?

Dennis A. Muilenburg - The Boeing Co.

Yeah, well, first of all, Brian, on Space Force and more broadly on the Space business, I'm very encouraged by what I see as the administration leaning forward on investing in space, and all dimensions of the Space business, not only Space Force, but more broadly, the work that's going into space exploration and the reinvigoration of that entire ecosystem.

And we've had the opportunity to participate as part of the National Space Council and be on the user Advisory Group there, partnered with the administration. So, we have industry voice at the table as we shape these potential opportunities.

So from that standpoint, I'm very encouraged about the U.S. Government leaning forward and investing in space. It's good for business. It creates growth opportunities for us. It's also a great way to develop STEM talent for the future.

Now, when we look at our growth opportunities going forward, we do see the Space business as an important part of that and that spans from low earth orbit commercial travel and access to the space station. It includes our satellite business and it includes deep space exploration, including the space launch system with a focus on returning to the moon and then stepping to Mars. So, we're going to continue to lean forward in that business. It's an important investment area for us.

Stepping back to your second question on services, we continue to see that as a very attractive growth market for us, and we've set a high bar target of growing that to be a \$50 billion a year business over the 5 year to 10 year timeframe. And while we're a year into that effort, I think we have some good signs, especially if you look at the growth year-to-date of 11% versus 3.5% in the market. Good signs that our strategy is working.

A lot of work ahead of us and it's an integrated organic and inorganic investment strategy, primarily driven again by organic investment parts, mods and maintenance, our training business, our digital business, those are all known organic investments. And where it makes sense we'll complement that with inorganic investments, but we clearly see acquisitions as a bolt-on complement to what is primarily an organic investment strategy.

Operator

Next, we have the line of Dominic Gates of Seattle Times. Your line is open.

Dominic Gates - The Seattle Times Co.

Good morning, everyone.

Gregory D. Smith - The Boeing Co.

Hi, Dominic.

Dominic Gates - The Seattle Times Co.

I want to ask about the maturity of the 777X, the new automated technology that you've introduced there. So you have both the new wing center and you've added the wing assembly automated equipment now for that and you've also got the FAUB fuselage robotics. Both of those initially had some issues, challenges as they were new. Are they now, both the fuselage and the wing automated systems, now operating the way that you want them to? And how will you plan to use any of that for NMA?

Dennis A. Muilenburg - The Boeing Co.

Yeah, Dominic, we continue to make very good progress on those automation systems and while I won't declare them to be in final state, it's very clear that we've made progress both on the fuselage automated systems as well as the wing build system.

And I think the key thing that you see in our focus here is that while those automation systems were designed purpose-built to be used for 777X production, we've de-risked those systems by pulling them forward in the factory and applying them to the current 777 program where it makes sense.

So, we've been able to use that as a way to de-risk and as you pointed out, there have been some challenges as we've ramped up those automation capabilities. That's exactly why we pulled them forward into the 777 line is to experience and de-risk those systems.

We've seen them continue to mature. We're seeing operational efficiency gains in our factory. We're seeing safety benefits for our workforce. We're seeing quality benefits. All of the things we hope to get out of the automation are coming to bear and we're going to continue to mature those as we move into the test program for 777X.

And if we decide to launch NMA, part of that would leverage the next generation of automation technology. Again, as we digitize our airplanes, it becomes even more straightforward to apply these automation techniques and we're going to see costs and schedule benefits. We're going to see safety benefits for our workforce, and this is a key part of how we're transforming the Boeing enterprise for the future.

Gregory D. Smith - The Boeing Co.

Operator, we have time for one more question from the media.

Operator

Certainly. Our last question will come from the line of Andrew Tangel of Wall Street Journal. Your line is open.

Andrew Tangel - The Wall Street Journal

Hi, there. Thanks for taking the question.

Gregory D. Smith - The Boeing Co.

Hi, Andrew.

Andrew Tangel - The Wall Street Journal

Hey. The Chinese carriers and lessors have previously played a significant role in the orders and commitments at the airshows in Paris and Farnborough, but there weren't that many fresh deals from Chinese companies. At the recent airshow in Farnborough, by one estimate, almost half of Boeing's new orders and commitments at last year's Paris airshow came from Chinese companies.

What do you make of the relative absence of a large number of Chinese buyers at this year's airshow, especially in light of how much growing demand you expect from China over the next couple of decades?

And does this potentially signal that Chinese buyers are holding off making orders or commitments because of some of the trade friction including between the U.S. and China right now?

Dennis A. Muilenburg - The Boeing Co.

Yeah, Andrew, look at our total orders book, as we noted, very strong. And in fact, if you look at total orders and commitments year-to-date of more than 900 aircraft, commercial aircraft, that gives you a sense of the overall strength of the market.

I don't find it surprising one way or the other that we may or may not have orders from a particular region or a particular customer at the airshow. We don't design our orders profile around airshows. We have some customers who want to make announcements at airshows and we work with them to do that, but our view is much more of a steady, sustained growth and orders throughput and you see that reflected in our month-to-month orders and sales.

Our Chinese customers are exceptionally important to us. They're a big part of the backlog we have of the 5,900 aircraft we have in backlog. They're a strong portion of that. The future market we talked about, the world needing 43,000 airplanes roughly over the next 20 years, about 7,200 of those are in China, so it's an important customer for us. We're well-positioned in China. We're working closely with our customers there. We're ramping up capability in China, while we ramp-up in the U.S. as well.

And I'll go back to my fundamental point that as we think about China-U.S. trade relationships, aerospace is something that's good for both countries. It's mutually beneficial. It creates growth capacity in China. It's helping them grow their economy, it's growing jobs in China, and as China grows, it's growing jobs in the U.S. and our 737 production line for example, as we ramp-up building on Chinese demand, that's growing U.S. manufacturing jobs.

And it's very clear to us that free and open trade environment and good relations between China and the U.S. is not only beneficial to the aerospace business, but in turn the aerospace business is beneficial to the economies and jobs of both countries.

Phil Musser - The Boeing Co.

Thank you. That concludes our second quarter earnings call. Again, for members of the media, if you have further questions, please contact our Media Relations team at 312-544-2002 or via e-mail. Thank you very much.