

Operator

Thank you for standing by. Good day everyone and welcome to The Boeing Company's Second Quarter 2016 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'm turning the call over to Mr. Troy Lahr, Vice President of Investor Relations for The Boeing Company. Mr. Lahr, please go ahead.

Troy Jeffrey Lahr - Vice President, Investor Relations

Thank you and good morning. Welcome to Boeing's second quarter 2016 earnings call. I'm Troy Lahr and with me today is Dennis Muilenburg, Boeing's Chairman, President and Chief Executive Officer and Greg Smith, Boeing's Chief Financial Officer. After management comments, we'll 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 discussions today are likely to involve risk 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'll turn the call over to Dennis Muilenberg.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Thank you, Troy, and good morning. My comments today will focus on our second quarter results, the health of our business environment and our growth plans going forward. After that, Greg will walk you through the details of our financial results and outlook. Now let's move to slide two.

Our second quarter financial results included both the continued solid underlying operating execution and strong cash flow performance of our commercial and defense businesses and a substantial impact to earnings from decisions we made on the 787 and 747 programs and increased investment needed on the KC-46 tanker program.

I'll come back to explain each of those items in a moment, but let me say up front that we're confident that the decisions we made on 787 cost reclassification and 747 production were the right proactive ones to reduce future financial risk and strengthen our position and focus going forward.

The added investment on tanker, while not insignificant, enabled completion of important testing while sustaining our view of the long-term multi-decade value this program will generate for our customers and our shareholders.

Excluding those items, both of our businesses produced double digit margins in the quarter and we continued to deliver on our commitments to invest in innovation while also returning cash to shareholders. We generated \$3.2 billion of operating cash flow in the quarter, repurchased \$2 billion of Boeing stock, and increased our dividend per share 20% over the prior year for a payout of \$691 million in the quarter.

Revenue in the second quarter increased to \$24.8 billion on strong commercial airplane deliveries and growth in our services business. We reported a core earnings per share loss of \$0.44, reflecting continued solid operating performance across our production programs that partially offset the 787 cost reclassification and the 747 and tanker charges.

On the 787 program, during the quarter we reached a decision point on whether to move forward and invest funds for the refurbishment and future sale of the two remaining initial flight test aircraft. We elected not to do so and subsequently we reclassified unit costs associated with those aircraft from program inventory to R&D expense resulting in a noncash \$847 million after tax earnings impact.

On the 747 program, we decided to reduce future production expectations and revenue assumptions to account for current and anticipated weakness in the air cargo market. These program assumption changes drove the \$814 million after-tax charge in the quarter. These charges also include the write-down of the remaining 747 deferred production costs which significantly derisked the program going forward. Despite the ongoing challenges of air cargo market, we continue to see the 747 as a unique and significant value creator for our customers over the long-term.

A \$393 million after-tax charge on the KC-46 tanker program reflects our assessment of the cost to address previously announced program schedule and technical challenges, including implementation of the hardware solution to resolve the refueling boom axial load issue identified during flight testing, delays in the certification process and concurrency between late stage development testing and initial production.

To the credit of our team working with the Air Force, the hardware solution to the boom issue worked as planned. With the aircraft's recent success in refueling an F-16, A-10 and C-17, we have now completed all required testing to receive the Milestone C production approval from our customer which is expected next month. Recognizing the risks inherent in the

remainder of the flight test program, our team is dually focused on the work ahead on meeting our commitments under the revised program schedule and providing our Air Force customer the best aerial refueling tanker ever built.

While we are reducing core EPS guidance for 2016 to reflect the impact of these three items I just covered, we are maintaining our revenue and cash flow guidance based on the underlying strength of our business. Greg will provide more details on that later. Now let's look at the second quarter operating performance for both of our businesses.

At Boeing Commercial Airplanes, second quarter revenue increased 3% to \$17.5 billion on 199 deliveries. Notwithstanding overall solid core operating performance, the charges and cost reclassification led to an operating earnings loss in the quarter. Key milestones in the quarter included successfully delivering the first 12 per month rate aircraft on the 787 program, declaring the 787-10 production ready, opening the 777X composite wing center and completing high-altitude flight testing on the 737 MAX which continues to run ahead of schedule.

At Boeing Defense, Space & Security, second quarter revenue was \$7.2 billion. Operating margins were 8.3%, reflecting strong performance offset by a portion of the tanker charge. Key contract awards during the quarter included an order for 12 CH-47 Chinooks for the Royal Netherlands Air Force and 24 AH-64 Apache helicopters for the Qatar Air Force. In summary, notwithstanding the accounting charges and the cost reclassification in the quarter, we had solid underlying operating performance, achieved critical program milestones and returned significant cash to our shareholders.

With that, let's turn to the business environment on slide three. Our overall view of the business environment remains generally positive due to healthy industry fundamentals. We recently updated our 20-year commercial market outlook and based on solid traffic growth and continued replacement demand, we now forecast nearly \$6 trillion of demand for 39,620 commercial airplanes, an increase of nearly 1,600 from last year. Global passenger traffic continues to solidly outpace GDP, with IATA reporting 6% growth year to date. On the cargo side, the market remains sluggish with year to date freight traffic down approximately 1%.

We continue to keep a watchful eye on global market conditions for both passenger travel and cargo to ensure that supply and demand are balanced, with particular attention being paid to the wide body segment. While oil prices have meaningfully rebounded from lows earlier this year, our customers continue to tell us that movements in oil prices have not substantially changed their view on future fleet planning or their

commitment to existing delivery schedules. As always, we see isolated pockets of market softness such as Russia and Brazil. However, we will continue to manage our skylines to maintain production schedules and health.

New order activity is continuing at a moderate but healthy pace as indicated by the flow of announcements at the Farnborough Air Show. As a result of the compelling and enduring value proposition of our airplanes, requests to change deliveries are holding well below the historical average. Over the past 12 months, deferrals, accelerations, debookings and cancellations remain at about 1% of our backlog. We continue to expect commercial aircraft deliveries to ramp up beyond 900 aircraft per year through the end of this decade, driven by ongoing market demand in our sizable and diverse backlog.

Turning to individual airplane programs, demand remains strong for the 737 with a robust backlog of nearly 4,400 firm orders. We remain on track to raise 737 production from the current 42 per month to 47 in 2017 followed by 52 per month in 2018 and then 57 per month in 2019. And importantly, even at the 57 per month rate, we continue to be oversold.

Turning to the twin aisle market, while long-term demand remains strong, we have seen some hesitation in near-term demand in recent months varying by program. For the current generation 777, our backlog as of the end of the quarter stood at 175 airplanes. So far in 2016, we have added eight net new 777 orders and commitments. For the full year, we are targeting approximately 40 orders as we focus on ensuring a smooth profitable transition to the 777X production.

Our 777 delivery slots are completely sold out for 2016 and more than 80% sold out for 2017. For 2018, when we will begin phasing in production of the 777X test aircraft, we are nearly 60% sold out at the lower planned delivery rate of approximately 5.5 per month. We are working an active customer pipeline to fill the remaining 2017 and 2018 delivery slots, but we clearly have more work to do over the next few months to hold the current 777 production plans. With a strong foundation of 306 orders from six customers, interest and demand in our new 777X remains high and the development of this next game-changing wide body remains on track.

On the 787 program, our backlog of more than 700 orders remains the foundation behind our production rate plans. As we discussed at our investor conference, securing additional orders to solidify our end of the decade 14 per month production rate plan remains a priority. As always, aligning supply and demand to maximize profitability will guide our decisions on 777 and 787 production plans.

On the 747 program, as I mentioned earlier, air cargo market headwinds continue to pressure demand and pricing. So far this year, we have captured four 747-8 freighter orders and continue to work a number of sales campaigns to build the 747 production skyline. That said, this segment of the market remains challenging. We will continue to monitor it closely while aggressively driving productivity and cost reduction to win additional orders.

On the commercial services side, we continue to deliver on our strategy to grow this element of our business. We recently announced agreements with six airlines from around the world to provide advanced analytic solutions to increase their efficiency in operating over 500 airplanes. Furthermore, in the largest commercial airplane services deal in Boeing history, Norwegian committed through 2034 to Gold Care coverage for both its 737 MAX fleet and to expanded coverage of the airline's entire 787 Dreamliner fleet.

Our significant global scale and depth, intimate aircraft knowledge, and our substantial installed base combine to provide a meaningful opportunity to continue growing our services and support business, including our traditional parts, mods and upgrade business as well as expanding further into data analytics and information-based services. Overall, the outlook for Boeing Commercial Airplanes remains positive as we continue to execute on our robust backlog, smoothly transition 737 production to the MAX, and complete development of the 777X and the 787-10.

Turning to Defense, Space & Security, we continued to see solid demand for our major platforms. Domestically, the President's budget request for fiscal year 2017 advances key BDS programs and we are anticipating a period of modest growth in defense spending over the next five years.

Internationally, demand for our offerings remains healthy as well, in particular for rotorcraft, commercial derivatives, fighters, satellites and services. During the second quarter, international customers represented 29% of BDS revenue and 37% of the current backlog. The strength of our defense and space business stems from our solid portfolio of products and services, our investments in innovation and affordability, as well as leveraging our One Boeing advantage.

We continue to focus on areas that are priorities for our customers such as commercial derivatives, rotorcraft, satellites, services, human space exploration and autonomous systems. We are investing in future franchise programs and leveraging capabilities and technologies across the enterprise for the T-X trainer, JSTARS recapitalization, MQ-25 A, formerly known as UCLASS, advanced weapons programs and other important opportunities. We are also encouraged by the domestic and international opportunities for our proven, affordable and highly capable fighter aircraft.

In summary, our plans and strategies are aligned to the realities and opportunities of our markets. Our teams are focused on innovation and growth and on delivering solid operating performance. We remain confident about our position and future prospects. Our focus is on accelerating our efforts to drive quality, safety, productivity and organizational improvements through the implementation of lean, capturing the value of quality, partnering for success and our second century design and manufacturing initiatives.

Now, over to Greg for our financial results.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Thank you, Dennis, and good morning. Let's turn to slide four and we'll discuss our second quarter results. Second quarter revenue increased to \$24.8 billion driven by strong commercial airplane deliveries and solid defense revenue. Core earnings per share was a loss of \$0.44, impacted by the previously announced \$3.23 of charges and cost reclassification. Notwithstanding these impacts, the core business performance was solid in the quarter.

Let's now move to Commercial Airplanes on slide five. For the second quarter, our commercial airplane business reported revenue of \$17.5 billion on 199 airplane deliveries. BC operating margin in the quarter were impacted by the \$2.8 billion related to the 787 cost reclassification and the 747 and tanker charges. The results were also impact by higher planned R&D spending as we ramp up on the 777X program. Excluding the charges and the cost reclassification, BC operating margins were solid 10.3%.

Commercial Airplanes captured \$11 billion of net orders during the second quarter and backlog remains very strong at \$417 billion and nearly 5,700 aircraft, again equating to seven years of production. 787 deferred production declined by \$1 billion in the quarter driven by the cost reclassification, bringing the balance at the end of the quarter to \$27.7 billion. When normalizing for the cost reclassification, deferred was better than planned at an increase of just \$33 million.

As we previously discussed, recovering the 787 deferred production over the remainder of the decade will be a significant driver of cash flows. Our confidence in this recovery and the cash generation comes from the shifting of the delivery mix for more -9s and -10s, improved pricing over the remaining 900 aircraft and supplier stepdown pricing as well as internal productivity. We continue to make progress on the 787 program, including successfully transitioning to the 12 per month rate, increasing deliveries of

the 787-9, reducing production flow times and lowering unit cost while introducing the 787-10 into the production system.

Now let's turn to Defense, Space & Security results on slide six. Second quarter revenue in our defense business was \$7.2 billion and operating margins was 8.3%, largely driven by the strong performance that was offset by the BDS \$219 million pre-tax tanker charge. Boeing military aircraft second quarter revenue was \$3 billion, reflecting lower planned C-17 and Chinook deliveries. Operating margins of 5.9% reflect the impact again of the tanker charge. Network and space systems reported revenue of \$1.8 billion, operating margins of 8.5%, reflecting the timing of ULA launches. Global services and support revenue increased 12% to \$2.4 billion, reflecting higher volume in aircraft modernization and sustainment. Operating margins were 11.1%, reflecting program mix. Defense, Space & Security reported a solid backlog of \$55 billion with now 37% of that business from customers outside of the United States.

Let's move to the next slide, please. Operating cash flow of \$3.2 billion for the second quarter was primarily driven by solid operating performance. With regards to capital deployment, as Dennis mentioned, we paid \$691 million in dividends and repurchased 15 million shares for \$2 billion in the second quarter, bringing our year-to-date repurchase to 44 million shares for a total of \$5.5 billion as we continue to deliver on our commitments to our shareholders. Furthermore, this reflects the ongoing confidence in a long-term outlook of our markets and our business. We continue to anticipate completing the remaining \$8.5 billion repurchase authorization over the approximately next two years. Returning cash to shareholders along with continued investment to support future growth remains top priorities for us.

Let's move now to cash and debt balances on slide eight. We ended the quarter with \$9.3 billion of cash and marketable securities. Our cash balance continues to provide solid liquidity and positions us well going forward.

Let's now turn to slide nine and we'll discuss our outlook for 2016. We are reaffirming our 2016 guidance for revenue, deliveries and cash flow. Our core EPS guidance for 2016 is lowered by \$2.05 a share to now be between \$6.10 and \$6.30, reflecting the second quarter charges and cost reclassification totaling \$3.23 that was more than offset by improved core operating performance and tax benefits.

The core operating engine continues to deliver strong results as we remain focused on increasing production, driving productivity improvements, maximizing cash generation and efficient deployment, at the same time taking appropriate actions to derisk our business going forward.

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

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Thank you, Greg. As we move into the second half of 2016 and begin Boeing's second century in operation, we know we cannot stand still if we are to further our industry leadership and honor the rich legacy of generations of talented, hard working people that built this company. Our teams remain intensely focused on growth, disciplined execution, quality and productivity improvement and meeting our customer commitments. Our priorities are to continue building strength on strength to deliver on our existing plans and to stretch beyond those plans by sharpening and accelerating our pace of progress on key enterprise growth and productivity efforts.

Achieving these objectives will require a clear and consistent attention to the profitable ramp-up in commercial airplane production, continuing to strengthen our defense and space business, delivering on our development programs, driving world class levels of productivity and performance throughout the enterprise to fund our investments in innovation and growth, and to develop and maintain the best team and talent in the industry, all of which is to position Boeing for the next 100 years and continued market leadership, sustained top and bottom line growth, and to create increasing value for our customers, our shareholders, our employees and other stakeholders.

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

Question-and-Answer Session

Operator

First with Cai von Rumohr with Cowen & Company. Please go ahead.

Cai von Rumohr - Cowen & Co. LLC

Yes. Thank you very much. So if you back the charges out of your BCA results, they look particularly strong. You did better on 787 deferreds. Could you comment on any profit accrual rate changes you had, any block changes you had in the quarter, and how should we think about those opportunities and the deferreds on the 87 going forward?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, Cai, on 737 we did have a block extension there and we had an increase in overall booking rate on program, and also on 67 we had a block

extension there. We had a little bit better spending with regards to G&A and some other period expense, in particular fleet support. Those were really the primary drivers in the quarter. Just good solid performance across the programs.

On the deferred, I'd say the profile of the deferred remains intact of what we talked about. Again, as we focus on unit cost day by day, airplane by airplane improvement and getting that model mix up with more -9s, now the introduction of the -10, it's all about cash. and so how are we improving the overall cash flow of that program. Teams are doing a great job. We got certainly lots of work in front of us, but I think when you're out in the factories today, you'll see some very good momentum and very good focus on overall productivity initiatives that are also obviously going to help that cash profile going forward. So the fundamentals as far as the cash flow story on 787 remain intact.

Cai von Rumohr - Cowen & Co. LLC

Thank you.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Operator

Our next question is from Jason Gursky with Citi. Please go ahead.

Jason M. Gursky - Citigroup Global Markets, Inc. (Broker)

Yeah, good morning everyone.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Hey, Jason.

Jason M. Gursky - Citigroup Global Markets, Inc. (Broker)

Hey, Greg, I think this one will be for you. I wanted to talk a little bit about working capital and apply that to cash.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah.

Jason M. Gursky - Citigroup Global Markets, Inc. (Broker)

There's been a lot of chatter out there in the media, even amongst some of your suppliers that have hosted earnings calls this quarter about a lengthening payables cycle at Boeing. So I was wondering if you could just chat a little bit about your strategy there, how long it's been in place, how much more we have to go, and tie that to the sustainability of cash flows. Are we getting a one-time bump this year, or have you been working on this for a while and it's been masked? I just want to get a sense of whether we're going to have some lumpy cash flow outcomes here really in the next several quarters or the next several years because of this deployment of your new strategy here.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah I mean, Jason, I'd say this is just back to fundamentals around working capital, how we're collecting, how we're paying and then ultimately how we're managing our inventory. And we've got initiatives in place for each. When it comes to payables, we have changed our frequency of pay that we have gone from daily to twice a month. Again, that's in line with industry practices. At the same time, we're looking at terms across all of our contracts and again looking to get those to industry standards, but ultimately we want to get those to top quartile standards. And there's no reason why we shouldn't, and frankly a lot of our supply chain is already there.

And then again, finally on the inventory, we're looking at all aspects of the inventory across the programs. Float time on 787 is a great example of that, and we're going to continue that focus. So I wouldn't view it as anything special or different. Is there enhanced focus on those elements of cash flow, there certainly is. But that's the objective, certainly get to industry standards and then beyond that as Dennis has talked about, what is top quartile or a global industrial champion look like, and there's no reason why we shouldn't be able to get to those levels of efficiency.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

And Jason, to the second part of your question there, as Greg has pointed out, this is not a one-time event or implementation. We see this as a key element of our longer-term cash growth plan and consistent with our plans for the business to grow cash year over year.

Jason M. Gursky - Citigroup Global Markets, Inc. (Broker)

Great. That's helpful. Thank you, guys.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Operator

Our next question is from Seth Seifman with JPMorgan. Please go ahead.

Seth M. Seifman - JPMorgan Securities LLC

Thanks very much and good morning.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning.

Seth M. Seifman - JPMorgan Securities LLC

Dennis, you mentioned services in the monologue and it also was a little bit more prominent in the release than it's been in the past. And so I wonder if at some point maybe you'd consider disclosing the services contribution at Boeing commercial. And then just as a question, we talk about services, but I think it really means kind of aftermarket more broadly and that includes spares and parts. And so what part does that play in the strategy? And is there investment required there to either qualify new parts yourself or to incentivize the alternative suppliers to qualify new parts? Is that going to be meaningful at some point and it would it have only an impact on sort of new platforms going forward or could it have an impact on existing and production platforms?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Great question, Seth. And what you're pointing out here is, as we discussed at our investor conference, we see services growth broadly as one of our strongest growth areas going forward, and that spans both commercial and defense. It is a place where we are investing for the future, have been all along, and you're beginning to see the fruits of that investment and we're going to continue to work on that front. That includes modifying our approach to our intellectual property and how we manage and control that, our proprietary parts business and what I'll call the traditional parts and modifications businesses that leverage our OEM knowledge base. It also includes a more significant investment in data analytics and information-based services, and you can see some of the progress on that front.

I mentioned a couple in my opening comments, but more broadly, we now have for example 60 airlines enrolled in subscription contracts for Boeing maintenance and engineering work that covers about 2,200 aircraft. We have another 84 customers with about 3,800 aircraft that are benefiting from our airplane health management services, and we still see a lot of runway ahead of us in these data analytics and information-based services agreements where we can add value for customers and also add value for Boeing. And this includes an increased focus from our senior executive team on growing services, investments both inside of Boeing and with our supply chain as you pointed out, and we do see this as a long-term growth area both top line and bottom line. In general, services is accretive to our margins and our bottom line performance.

Seth M. Seifman - JPMorgan Securities LLC

Okay. Thank you very much.

Operator

Our next question is from Rajeev Lalwani with Morgan Stanley. Please go ahead.

Rajeev Lalwani - Morgan Stanley & Co. LLC

Hi, gentleman. Thanks for the time. As it relates to the 777, can you just talk about your comfort from here as it relates to getting the additional 40 orders that you mentioned as well as the point at which you'll know whether or not the production cuts going in next year are sufficient?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah Rajeev, let me just take that one head on here. On 777, we understand the reality of where we're at. And as I said, in 2017, we've already announced we're going to a seven per month production rate. We're 80% sold out against that production rate. In 2018, as we introduce the 777X into the line and we build test aircraft, as we have announced before, the effective delivery rate in 2018 will drop to 5.5 a month, and we're 60% sold out against that profile. So we know exactly where we're at today.

Now the fact is year-to-date, we've got net orders for eight 777s against a target of approximately 40. So clearly we have work to do yet over the next few months to fill out that orders book. And we're working hard on a number of key campaigns. Ray and his team are out with our customers and we are aggressively working that every day. We do see that the value proposition of the airplane is holding up, but the wide body market is clearly a challenging place right now. So we've got work to do to find those additional orders.

Now in the case of if those orders don't materialize, we're going to continue to keep a close eye on our production plans and make sure that we keep supply and demand in balance. That's the key to our future, and we're going to make sure we make a profitable and efficient transition to the 777X. So we're going to continue to work those campaigns hard. We're going to work to fill out the production plans as we currently have laid them out, while being mindful of keeping supply and demand in balance.

Now all of this, I think it's important to take a step back from all of this to look at our overall plans over the next five years. Regardless of how that scenario plays out on 777, this is a growing business where we're going to be delivering north of 900 airplanes a year by the end of the decade, and we see this as a year over year cash growth business spanning all of those scenarios that we're talking about. So we're going to do the right thing here, keep wide body supply and demand in balance, make sure we have the right transition to 777X, and I think it's also worth reminding that in the long term, the wide body marketplace is still an attractive marketplace. And as you get out into the 2020s, there's a large replacement cycle that's very clear to us. So this is about efficient transition to the 777X and the 777X is the right airplane for the future, all within the context of a compelling growth story and year over year cash growth.

Rajeev Lalwani - Morgan Stanley & Co. LLC

Thanks, Dennis.

Operator

Our next question is from Rob Spingarn with Credit Suisse. Please go ahead.

Robert M. Spingarn - Credit Suisse Securities ([USA](#)) LLC (Broker)

Good morning.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Robert M. Spingarn - Credit Suisse Securities ([USA](#)) LLC (Broker)

This question I think could be for either of you, but going back to the investor day, you talked about BCA margins improving double digit I think next year and mid teens toward the end of the decade, if I have that right. And obviously you have a lot of initiatives ongoing to get there. I wanted to ask you, how much of this margin improvement is negotiated or in place at

this point, and how sensitive are those targets to any downside in 777 essentially relative to what you just talked about, Dennis?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah, Rob, let me just paint the broad brush on that and I'll ask Greg to tag team on this one. But our plans for the future remain consistent with what we described, and that is we're headed towards double digit margin in our commercial airplane business next year, and pleased with the performance this past quarter. But we still have work to do to make that sustainable. And then in the longer term, towards the end of the decade, headed towards that mid teen margin aspiration. And that's a tough, challenging target, but I think the right one for this business for the long term, and it will drive the right behaviors and investments for the future.

And achieving those kind of margins spans all of our internal and external work, so it includes our internal productivity work, the relentless focus on capturing value of quality and our lean plus efforts. It includes our development program excellence initiative, all of the things we're doing to drive internal productivity to incrementally pick up margins, things like block extensions on our programs are accretive to margins in general as well.

And as I mentioned earlier, as we grow the services business, that also tends to be accretive to margins. In parallel with that internal work, we're also working with our supply chain. Partnering for success is a key element of this, and while we've made a lot of advancements on that front, we still have a lot of work to do across our supply chain, and we'll continue to be relentless there as well. But think of this as a portfolio of effort all headed in the same direction. Greg, do you want to add anything to that?

Robert M. Spingarn - Credit Suisse Securities ([USA](#)) LLC (Broker)

Dennis, if I could just interject for a second just to clarify. Could you clarify or quantify the internal versus the external or the supply chain versus the internal in terms of the margins themselves, the upside?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, I mean, Rob, frankly, we're looking at market based certainly across the board. And so whether that's internal or external, it's all about market based. And really kind of backing into that, and as you know, the greatest certainly percentage of our cost structure is outside, and so we're equally focused there. But at the same time, you've heard us. You've been in the factory recently during the investor conference. You can see, there's a relentless focus inside. So I'd say no rock unturned. We're looking for all opportunities, but just think about it as being market based type targets that

are driven through all the elements of the cost structure, whether it's in home office here or out on the programs.

And I think as Dennis said, each of these are at different levels of maturity. Some of these we've obviously, we've captured some in certain aspects of the business. But I'd say everybody is very aligned on all the elements that Dennis talked about, this portfolio approach, and we're all – I'd say it's all on our score cards in being held accountable to try to achieve the aspirational targets that have been put out here.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

This is a clear and enduring focus for us, and it's about winning, competing and winning in the marketplace. It's about returning value to our shareholders, and it's also about funding our future investments and our innovation. And we intend to accomplish all three objectives.

Robert M. Spingarn - Credit Suisse Securities ([USA](#)) LLC (Broker)

And the 777 sensitivity for this process?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, well as Dennis said, I mean we've run certainly sensitivity analysis against the 777 bridge over that I'll say short period of time between the current platform and the X, and we've taken that into consideration around our comments about cash flow continuing to grow through that period. So we think we can do that through that period. But we got a bunch of different scenarios obviously we're running through there, but we're sticking with the plan we have and staying focused on trying to fill that bridge and particularly in near term. But we got work to do, and like Dennis said we'll match production – demand to production at the right time and it's one element of the portfolio, and I don't want anybody to over rotate on that element. It's an important one, but there's a lot of other things going on in this company that are either driving profitability or cash, and it's not just lying on one program having a transition rate for 18 to 24 months.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

We're going to do the right thing to make sure we have an efficient transition to 777X and all of that is enveloped by an expectation of year over year cash growth, and that spans all of the scenarios we've looked at.

Robert M. Spingarn - Credit Suisse Securities ([USA](#)) LLC (Broker)

Thank you both.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

You're welcome.

Operator

Next we go to Doug Harned with Bernstein. Please go ahead.

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

Thank you. Good morning.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning, Doug.

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

I'd like to, if we can understand a little bit more on the ramp down in deferred production for the 787 and there are really three aspects of it I'm interested in. One is, first if you end up not going to 14 a month and staying at 12, what impact would that as a rate, what impact would that potentially have?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah.

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

Second, if on the 787, you've talked about the advantage of the -9. You've got better pricing and that costs ultimately can come down to be comparable to the -8, and what timeframe would we expect to see those -9 costs become similar on a unit basis to the

-8?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah.

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

And the third one of these is on the 787-10, what kind of disruption would we expect given the high degree of commonality between the -9 and the -10

when it goes into service? So sorry, it's three parts but all related to deferred.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

I think I got them all, Doug, and if not, I'm sure you'll tell me. So first one, if you looked at – obviously we're not at the point of making any different rate decisions or assumptions than what we got in place, but as Dennis said, we got work to do to fill out to the 14. As you know, that's an end of the decade implementation. But if you were to assume holding 12, it pushes that deferred curve out about 6 months. So not a significant impact. When you look at -8 and -9, you saw it when you were out here. I'd say, the design improvements that were taken off the 8 and put onto the 9, now that we're I'll say ramping up at, we're at about 10 a month right now on the -9. You're really seeing those come together in the factory.

And so unit cost now is about in line with on -9 versus -8. So the team again has done a great job. Lots of work in front of us, but the fact is over 125 units and they're now at the same level of -8, I think gives you a good sense of the design for manufacturing implementation that's taking place on that airplane. And listen, there's still a lot of ideas in the hopper. Some of those will mature; some of them won't, but they're not slowing down. And Mark Jenks and his team are doing a terrific job looking for more opportunities.

Disruption from 9 to 10, I think you said it. It is not as big of an impact certainly as it is from the 8 to the 9. That was by design. So that's in the production system today. So we certainly have provisioned for some longer flow times on those initial -10 units. Similar, I'll say methodology that we did from the 8 to the 9, but we're again I think as far as producing that airplane and a risk associated with that, it's a very different risk profile than it was from the 8 to the 9. So again, credit to the team on really focus on commonality in the production system to minimize that disruption as we enter it into the production system.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Real manufacturing commonality that's north of 95%. And Doug, as you know, we've already begun major assembly work into the 787 line on the -10. So that manufacturing commonality is holding up as we're going through implementation.

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

And just if I can on the rate change, the 12 to 14, what is the lead time that you need to pull the trigger to decide you're going up to 14 at a certain date?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Doug, let me give you a little bit of a feel for that. Right now we're sold out through 2018 if you look at the skyline on 787. We have a few open positions in 2019 that we're working and we're largely focused on filling out the 2020 production skyline. So that will give you a feel for the timeframe that we're looking at. As Greg said, this is a toward the end of the decade implementation. So you can back off from that a couple of years. We haven't pinned down a specific decision point yet because we're going to keep a close eye on the market, the signals from our customers. We've got time to do our due diligence here.

And again, our principle here is to keep wide body supply and demand in balance. And we're confident in the 787 program across that span of scenarios, and we're going to continue to work campaigns to fill out to the 14 a month rate step-up, and we'll evaluate timelines and decisions around that. But you can be very confident that whatever we decide, we're going to keep supply and demand in balance. We're going to do it efficiently and productively, and all of this again is enveloped by our expectation of a year over year cash growth business. It spans all of the scenarios we've talked about on both 777 and 787.

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

Okay. Great. Thank you.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

You're welcome.

Operator

Our next question is from Ron Epstein with Bank of America Merrill Lynch. Please go ahead.

Ronald Epstein - Bank of America Merrill Lynch

Hey, good morning guys.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Ronald Epstein - Bank of America Merrill Lynch

So I guess maybe a question for both of you just to see if we're thinking about this right. Does the roughly \$1 billion of deferred that was moved pre-tax to R&D, does that imply if you take that \$1 billion and divide it by what's left in the block that the profitability per airplane goes up by about \$1 million on a program basis? And then I guess the second part of that question is, when do you expect the program on a unit basis to be cash flow breakeven for 78?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Well, we broke even late last year.

Ronald Epstein - Bank of America Merrill Lynch

Okay. On a unit basis?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, so obviously as we move forward with the supplier stepdown, contractual stepdown pricing, we improved productivity. But even more, as I mentioned at the investor conference, Ron, the mix is a big play in here going forward. So getting these -9s into the productions that we have and you heard me talk about the unit costs recently and where they are, getting that -10 in, are obviously big drivers of cash flow going forward. The program margin did go up slightly in the quarter overall, and but it's still very low single digits.

Ronald Epstein - Bank of America Merrill Lynch

But just curious, Greg, is it about \$1 million per plane? Are we thinking about it right? Is it essentially \$1 billion divided by 900, what's left in the block?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, we're not really – I'm not really completely following your math there, Ron, but I would just tell you that we took \$1 billion out obviously and put it into R&D. So obviously research and development went up, and the overall program margin went up slightly as a result of that move. But again these are obviously two aircraft that we've been heavily utilized in flight test, and we made the right decision because it was the time to start spending company funds to modify those airplanes, and a limited marketplace for them. So we made that decision and reclassified them and it was absolutely the right thing to do.

Ronald Epstein - Bank of America Merrill Lynch

Okay. Cool. Thank you so much.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Operator

Our next question is from Carter Copeland with Barclays. Please go ahead.

Carter Copeland - Barclays Capital, Inc.

Hey, good morning gentlemen.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Hey, Carter.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Carter Copeland - Barclays Capital, Inc.

Just a clarification on that last answer, Greg, and then a quick question. But you said unit breakeven last year. Do you mean cash breakeven on the program last year?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Cash on the program, yeah.

Carter Copeland - Barclays Capital, Inc.

Okay. So we're close to eclipsing deferred production flipping over, but when do you -that's obviously at one end of the line. When you've got stuff coming off the line is when you'd get to see unit versus program. When should we expect that to flow from the deferred production all the way out to where we see it in the cash and unit.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Later this year.

Carter Copeland - Barclays Capital, Inc.

Later this year.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah.

Carter Copeland - Barclays Capital, Inc.

Okay. And I wanted to ask about the 737 margin increase that you referenced associated with the block extension. I know you had taken a rate adjustment downward associated with escalation in the past. Is this a reversal of that? And does it get it back to, have you recaptured that downward amount that you had before with this move?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, there's actually was still escalation pressure in the quarter across all the programs, not as much as prior quarters, but there was. And then the balance of that was offset by improved productivity and mix. Those are really the big drivers in there, Carter.

Carter Copeland - Barclays Capital, Inc.

Just volume in there, okay.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah.

Carter Copeland - Barclays Capital, Inc.

And with respect to escalation, when does that – I know it operates with a lag. And so you've seen the oil price come back up. That has a positive impact on that index. When does that make its way through the lag of the escalation formula?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

I'm hoping very soon. But again, we saw it minimized this quarter, and we'll have to wait until the publications come out for third quarter. But you're right. I mean the fundamentals are heading in the right direction. So we should start to see this as bit of more of a tailwind versus a headwind.

Carter Copeland - Barclays Capital, Inc.

Great. Thank you gentlemen.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Operator

And we'll go to Howard Rubel with Jefferies. Please go ahead.

Howard Alan Rubel - Jefferies LLC

Thank you very much. It's a two-part question related to some of the things you're doing internally. Greg or Dennis, you indicated the MAX EIS had accelerated so that, and I think Norwegian even used a May date which is pretty notable. Could you just address two things? One is what are you doing with the benefit of this acceleration and improved process, and how much of it is being used to either accelerate deliveries or do other things with the MAX?

And then also you commented on G&A being better, and I suspect it's probably due to, I'll call it the 787 performance hitting some of the standards that you've aspired to. So could you maybe put it together in an answer that sort of talks about some of the other things you're doing too outside of just production to make The Boeing Company and its customers better?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

You bet. Howard, I'll take the first part and then ask Greg to take the second part. On the MAX, as you've and, we have the opportunity to accelerate EIS. We had originally planned third quarter of 2017, but we now have publicly talked about that as first half of 2017. I won't be specific to individual customers as we have a number of discussions ongoing, but we have opportunities to accelerate into the first half of the year. And what you should read through that is that the MAX development program is going very well and running on cost and ahead of schedule. We've got all four test aircraft in the air, more than 300 hours on the airplanes, and the performance is looking solid, and the development program is clean.

And more broadly, if you get to your underlying question, I think this is a good example of how we can and should perform coming out of our development program excellence initiative. And this is about understanding the statement work clearly upfront, managing that statement work, keeping it balanced, doing the right systems engineering work, working with our supply chain. This is about disciplined innovation, and we're going to bring it, a product to the marketplace that has a great value add for our customers and do it in a way that's disciplined and on cost and schedule. And that formula that we've put in place now with our development program excellence initiative, we know it works, and we're taking the lessons learned from MAX and we're cross deploying those now into programs like the 787-10, the 777X, and into our future defense development programs.

And our objective here is very clear, and that is to have disciplined effective development programs that perform on cost and schedule that allows us to do reliable R&D planning and allows us to make best use of our innovation investments. So it's a good sign post for us, Howard. I think clearly a step in the right direction and we're going to leverage lessons learned from MAX across the whole enterprise. Greg, do you want to hit the second part?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah I mean, Howard, I guess with regards to the nonproduction, it's the same approach. I mean, we're really kind of trying to look at just even functional costs across the enterprise and looking at what is market-based affordability, what's best-in-class look like for an industrial company and challenging ourselves and where we are versus where they are and trying to learn for some best practices and then trying to implement them. Now some of this is still in the planning stage. Certainly not all of it is implemented, so I wouldn't run with any of it. But that's the framework, and that's the operating around it.

But it's all about how do we compete in the marketplace no matter what marketplace we're in across the portfolio, how do we generate cash in order to invest in our future as we have, and then deliver value to the shareholders. So those are kind of the, I'll say the framework that's around the approach, but it goes back to my comment about no rock left unturned. So whether it's functional costs that are supporting a program or program-specific, everybody has an affordability target. And again, different levels of maturity, some are making more progress than others, but the focus and the operating rhythm is all around that.

Howard Alan Rubel - Jefferies LLC

So I just want to make sure I understand then, that is some of this that you saw in this most recent quarter going to translate into either permanently lower G&A or also a little bit better R&D profile for the back half of the year?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, I think the R&D profile will be similar to what we outlined. I don't see that changing. On the G&A, I mean quarter over quarter, as you know, you're going to see it move around a little bit. But some of that certainly is sustainable, and some of that is just timing.

Howard Alan Rubel - Jefferies LLC

Thank you.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Troy Jeffrey Lahr - Vice President, Investor Relations

Operator, we have time for one more analyst question.

Operator

That will be from Sam Pearlstein with Wells Fargo. Please go ahead.

Samuel J. Pearlstein - Wells Fargo Securities LLC

Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning.

Samuel J. Pearlstein - Wells Fargo Securities LLC

I guess really, Greg, I was going to ask you just we've seen a lot in terms of the interest rate move this year, and I know you don't include pension in the core earnings, but can you just talk about required contributions or how to think about pension contributions over the next several years and how that may be changing in terms of with lower interest rates?

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Yeah, no certainly something, Sam, we're watching. Obviously with the transition that we made from the defined contribution to the – or defined benefit, defined contribution, that certainly helps us going forward when it comes to pension contributions. But we're certainly monitoring the interest rate environment. This year is obviously minimal. As I see it today, there will be contributions required next year. They'll be again in the hundreds of millions, not more than that. And kind of see that in the year following, but again we'll have to see where interest rates fall, and we'll make the required contribution. But we run that at kind of various levels, and again, because of the pension turnover, I don't see obviously that kind of headwind that I would have normally seen as far as required contribution if we were stuck with a DB plan for the next five years.

Samuel J. Pearlstein - Wells Fargo Securities LLC

Great. Thank you.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

You're welcome.

Operator

Ladies and gentlemen, that completes the analysts' question-and-answer session. I will now return you to The Boeing Company for introductory remarks by Mr. Tom Downey, Senior Vice President of Corporate Communications. Mr. Downey, please go ahead.

Thomas J. Downey - Senior Vice President, Communications

Thank you. We will continue with the questions for Dennis and Greg now. If you have any questions following this part of the session, please call our media relations team 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.

Operator

And we'll go to Julie Johnsson with Bloomberg. Please go ahead.

Julie Johnsson - Bloomberg LP

Hi, everybody. Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning, Julie.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Hi.

Julie Johnsson - Bloomberg LP

Dennis, a quick question. Could you just step back and sort of spell out your expectations for 747 following this latest reset? Do you see a future for this program beyond Air Force One?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah, Julie, as we announced the decision we made here, it takes into consideration a sluggish cargo market, and our projections for future production rates. And the decision in essence that we made was to maintain our current production rate of half an airplane per month that we're implementing this year and to extend that out into the future rather than assuming we would ramp back up to one a month in 2019. That's the

fundamental assumption change here, and it reflects what we see in the cargo market.

Now we still see a cargo or freighter aircraft replacement cycle out in that 2019, 2020 timeframe. We have a number of ongoing customer discussions in the cargo marketplace in addition to the two Air Force One airplanes that you referenced. So a number of very viable campaigns underway to fill to that half a month production rate. That said, we still have our work cut out for us.

Cargo is a tough market right now. I will say that the decisions we've made on 747 I think put that program in a much more solid footing for the future. It's aligned with the marketplace. As noted, we also wrote off any remaining deferred production inventory, so we've significantly derisked that program from a financial standpoint for the future. And we're going to continue to work to fill out the skyline.

Operator

Our next question is from Jon Ostrower with The Wall Street Journal. Please go ahead.

Jon Ostrower - The Wall Street Journal

Hey, good morning, guys.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Good morning.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Hey, Jon.

Jon Ostrower - The Wall Street Journal

A question about this change in supplier payment frequency. You talked about the need to be more competitive, aligned with how your suppliers are paying their own suppliers. But ultimately what is the goal here? What are you trying to be more competitive on? You've riled up GKN and Rockwell Collins, two of your closest suppliers that have – Rockwell Collins most notably has been held up as your sort of greatest example of how you want to be partnering for success as far as part of your cost cutting, and now they're out there really upset that they're missing their bottom line targets in the quarter. So I just want to understand what exactly you're trying to accomplish by doing this beyond just an industry norm practice when you've

got your closest suppliers who very rarely air public grievances calling you guys out.

Gregory D. Smith - Chief Financial Officer & Executive Vice President

Well, Jon, I guess I would start with, obviously we're in a competitive environment, and so it all starts with market-based affordability and then how does that impact your business. So as I indicated, when it comes to working capital, we're looking at where we are on different measures around working capital, and where everybody else is in this industry. And certainly the two suppliers you called out are great suppliers to us, and we've been working with them over the last year on transitioning to a more, I'll say, industry standard around payments. And we were paying daily millions of transactions, and we were paying daily. That's not an industry standard. We're going to twice a month. And then we're looking at terms again to be competitive, managing our working capital efficiently, and allowing us to invest in our future that ultimately everybody will benefit from, from our customers down to our suppliers. These are important partners.

But hey, we got to face into the environment that we're in and be efficient across the board. And as you know, under partnering for success, this is also us reaching back into the supply chain, taking best practices that we have encountered in other parts of our business or the supply chain and sharing those with the supply chain to ultimately make them better. So I'd say it's across the board, and again it's all about being market based and facing into those realities. And frankly in this case just getting to industry standards.

Operator

Our next question is from Al Scott with Reuters. Please go ahead.

Alwyn Scott - Thomson Reuters Corp.

Hi. Good morning. Dennis, you mentioned the slowing wide body sales and keeping an eye on rates to maintain balance and it seems like there's a bit more emphasis there on that rate adjustment possibility. Given your pledge really not to cut prices to win orders, is the 1 to 1 book-to-bill ratio now really an aspirational goal? And if not, what are you doing to improve sales?

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Yeah. Hey Al, first of all more broadly, we're still targeting a book-to-bill of 1 to 1 for the year. And again, we don't get too encumbered with the exact timing of those orders, and it's very clear that this year's order cycle is more favorable on the narrow bodies. And so if you're looking at numbers of aircraft, we expect the predominance of that orders flow this year to be in

the narrow bodies arena. That all said, we're going to continue to work hard to fill out the wide body skylines as well.

We don't need to make drastic changes to pricing in order to capture market share. We're not going to be driven to just get market share for market share's sake. I will say in the wide body marketplace, even though we're seeing some hesitation in buying, the value proposition of our airplanes is holding up well. So this is all about a look ahead to efficiently managing our production skyline and keeping supply and demand in balance.

And clearly we've got more work to do on the wide body front while narrow body orders are trending to be very healthy and continuing to be healthy this year. So that's our headset. And as normal, we do a lot of scenario planning around this and different assumptions around wide body orders and what that future skyline will look like. And as you heard earlier, our commitment is to make the decisions that allow us to make the transition on the 777 efficient and productive. And we will do that.

Thomas J. Downey - Senior Vice President, Communications

Operator, we have time for one last question if there is anyone remaining in the queue.

Operator

And we'll go to Benjamin Zhang with Business Insider. Please go ahead.

Benjamin Zhang - Business Insider

Good morning gentlemen.

Dennis A. Muilenburg - Chairman, President & Chief Executive Officer

Good morning.

Benjamin Zhang - Business Insider

I just wanted to take a step back and talk about the 787 program. I was wondering if you guys could give us an update on the remaining terrible teens inventory of the early build aircraft. How many do you guys have left and what are your plans for them?

Thomas J. Downey - Senior Vice President, Communications

Yeah, they're all sold. And so they'll deliver here over the next couple years.