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The Boeing Co. (BA)

Sanford C. Bernstein Strategic Decisions Conference

CORPORATE PARTICIPANTS

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

OTHER PARTICIPANTS

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

MANAGEMENT DISCUSSION SECTION

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Okay. I think we'll get started here. I'm Doug Harned at Bernstein, Aerospace and Defense analyst and I'm very happy to have with us again Dennis Muilenburg who is the Vice Chairman and President of Boeing. And with that, we're going to do a fireside chat and what I'd love to do is if you have questions, please pass them to the aisles.

With that, we'll get started.

QUESTION AND ANSWER SECTION

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

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Now Dennis I'd like to start out with perhaps you just giving us a picture of what you see as the two or three biggest opportunities and challenges at Boeing right now?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer



Yes, will do. And Doug thanks again for the opportunity to be here and join you today and thank you all for participating. When you step back and take a look at Boeing's position in the marketplace right now, today we see very strong commercial airplane market demand, driven both in terms of traffic growth and replacement value. We feel strong about the backlog that we've got in place and the product portfolio to go with that including our new generation of products that are being introduced in terms of the 787, the 737 MAX and the 777X.

And if we look at having that eight years of backlog in place and the opportunity to execute on that backlog and as a result generate cash earnings and return to our shareholders – that's one of the biggest opportunities we have immediately in front of us there, Doug. And along with that continuing the disciplined investment innovation that next set of commercial airplane products. And then in parallel with that, continuing to make targeted investments in our Defense business which is a nice foundational business and even though a tougher environment right now than the commercial marketplace one that's steady and we're seeing some signs of potentially budget compromise in the defense budget in the U.S. that I think presents some opportunity there.

So from an overall market and product standpoint, feeling strong about our position, our opportunity to execute on the backlog to produce shareholder value. There's clearly a big opportunity for us. And we're also very focused, including some of the responsibilities and my job of trying to drive that One Boeing effort across all of that with some of our cost cutting initiatives like Lean implementation, Partnering for Success and Development Program Excellence and working a lot of that hand in hand with Jim McNerney and the rest of our executive committee.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC



Now one of the things that we've certainly seen as critical for Boeing and not just this year but in the next few years has been the generation of cash. And you had a very big Q4 for cash. Q1 however, you didn't generate any free cash flow. You've maintained guidance about \$6.2 billion this year and I know you've said the cash this year should be followed by even more next year and more the year after. Could you take us through how you have confidence in that view what underlies that trajectory?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer



You bet. Our confidence and our ability to generate that cash and deliver to our shareholders remains very high. In fact, as we continue to execute, our confidence is growing and it's true that you do see some quarter-to-quarter variability. The fact that Q1 was a lighter quarter and cash was not a surprise to us. In fact, it came in slightly better than we anticipated. Q1 is traditionally our lightest cash quarter of the year. Part of that is timing. As you said, we do have some pull ahead to 4Q of 2014 which you saw in the numbers there. So not a surprise there and it's timing driven.

We have struck with our cash guidance for the overall year. Operating cash of greater than \$9 billion. We remain very confident in that. We do expect that cash profile to be aft-loaded to the second half of the year again as planned. Some of the key drivers behind that are continuing to drive cash and profitability on our core programs like 777 and 737. We also see opportunities for increasing cash generation as we ramp up our production line.

And if you look at the next several years with a rate increase plans that we have on 737 going from 42 to 47 to 52 by 2018, rate ups on the 787 line going from 10 a month to 12 to 14 by the end of the decade – those will also generate additional cash.

So quarter-to-quarter, you'll see some lumpiness and timing associated with cash performance. But stepping back from that year-over-year, our confidence in cash generation continues to grow and we do expect that to be a long term sustained trend, not one that has peaks and valleys but looking at it over the longer term sustained year-over-year cash growth and strong earnings generation as well.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Well, as you had 2015 to 2016 to 2017 and if you were to take that apart, you've got cash from the core programs from the 37 and the 777 and there is defense, second, you've got advances coming in and third there is the 787. Can you talk about those in terms of each piece and how you see those progressing over the next couple of years?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Yes, all three are direct contributors to our overall cash expectations. So these core programs we're continuing to invest in factory efficiency, productivity of those lines to generate additional cash and earnings. 777 for example, we're pulling some of the automation technology that we plan for 777X pulling it forward into today's 777 line to drive additional productivity. We've ramped up to 42 a month now in 737, building additional automation into that line as well, that will not only help us get to 47 and 52 but drive efficiency in the line we have today. We're building those 42 a month now in space that we once built 19 a month. So you get a sense of the efficiency gains we're making in those core lines. Both defense and commercial those investments and basic Lean implementation will be cash generators for us.

On advances, you're right. That's an important part of the equation for our Commercial business in particular and while we typically see about a 1% advance on new orders, the key on advances is production progress payments. And typically, you'll see those hit about 18 to 24 months in advance of delivery. And what you should see there is you see production ramping up that's going to drive advances in about 18 to 24 months ahead of those deliveries. So that will be another significant cash generator as we grow.

And that leads right to your third point on just the fact that we're ramping up on these production programs, creates great cash growth opportunity for us long term. So all three dimensions are important to us. And all three of those play together.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

But the last one I mentioned was the 787 specifically which right now is not net cash positive overall, right?



Dennis A. Muilenburg

efficiency in that line.

Vice Chairman, President & Chief Operating Officer

Yeah, and that is really the key opportunity for us going forward. One reason we expect to see cash growth as we press forward, we still expect that program to go cash flow positive before the end of this year. We expect to as we get to 12 a month towards the end of 2016, we're going to see further efficiency gains in that program, the learning curve behavior that we're seeing on the dash-9 derivative looks very good as that cost is already converging towards the dash-8 cost profile. We'll be rolling the dash-10 into that production line as well, with deliveries starting in 2018. The dash-10 and the dash-9 are about 95% common that gives us additional opportunities for

So as we see that line go cash flow positive, as we see the cost learning curves continue to head in the right direction, we're seeing productivity in our factories as well as in our supply chain gaining momentum and the investments we've made in producibility on both the dash-9 and the dash-10 to make it easier to build in the factory, will also give us opportunity to generate additional profitability and cash on that program. As a result, in terms of moving from today to where we expect to be in the future, perhaps the biggest cash generation opportunity we see is moving that 787 line to where we expect it to be in terms of long-term profitability and all signs are that we're headed in exactly that direction.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Well, you mentioned the dash-9 and that you're converging to the dash-8. By converging, I want to make sure I understand what that means, because I would expect – and one, it's a larger airplane, you've done a lot of work on the manufacturability side, the cost reduction and the design but when you say converged, does that mean the costs are actually becoming comparable to each other, or does that mean you're on a trajectory that's very similar to what you've been on, on the dash-8?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

We're seeing learning curve behavior that's equal to or better than what we saw on the dash-8. So we are seeing some of that early learning curve advance about a 25% reduction in dash-9 unit costs over these first roughly 20 units that we've delivered. So that's a significant step but in addition there is similar learning curve behavior. We're also seeing the fundamental costs converging towards the dash-8 and that speaks to the investment we've made in producibility of the dash-9: a lot of things that we've designed into that product in terms of how we do wing body joint and final assembly, how we do some of the supply chain integration. All investments that we made to make it more buildable in the factory which shows up as unit cost reduction. Now further advantage to that, as you know the dash-9 and the dash-10 bring additional operational value to our airline customers and as a result can generate additional pricing for us.

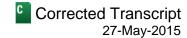
So the profitability of the dash-9 and dash-10 is also enhanced as a result. So that combination of cost convergence and favorable mix over time will make that line even more profitable. This year, we'll build roughly 50%-50% mix in terms of dash-8s and dash-9s. Next year, we'll build more dash-9s than dash-8s. So as that mix moves in that direction, it will also help overall profitability of the line.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

It just seems that – I think your guidance has been a lot about deferred production, peaking later in the year – basically triangulating on some of the things that you all said it looks like a \$28 billion or so type level. And then it

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would stay kind of a plateau level for a little while and come down as rate goes up. But the thing I'm trying to understand is we look at the dash-9 as being priced like 15% to 20% higher than the dash-8, if in fact that's the case and you are getting that cost to converge toward the dash-8, it seems like you would have an engine for cash that would even be beyond what one would expect as the mix shifts.

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

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Yes. And that's the fundamental of the 787 production line that gives us confidence in our long-term cash generation capability. So as you've said in the near term as we work through deferred production inventory, which has been a topic of high interest, we're going to see a couple of more quarters of growth in that, roughly at the level of what we saw in the first quarter of this year consistent with what we said before.

We expect that program to go cash flow positive towards the end of the year. In that timeframe, we'll see the deferred production inventory plateau as well and then come down as we come down on the back side of getting to rate 12 a month later in 2016. So that shape all remains consistent.

Over that profile, we're making those targeted investments in producibility and in our supply chain that we believe will lead to long-term cost reduction for the dash-9 and dash-10. And as you pointed out, with that mix, favorable mix shift, and the value that those airplanes are providing in the marketplace, our ability to generate cash on the 787 line is incredibly strong, not only from working up the near-term deferred production inventory but long term the right mix, the long-term producibility investments, the long-term supply chain optimization, all of that tells us this ought to be a strong cash flow generator year-over-year for the longer term.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

And you mentioned before about the things you've done in productivity on 737 but I think if you look at typical program transitions over time, you would see that as a new airplane comes in – in this case the MAX – is pretty important derivative change. As the MAX comes in, you would expect a typical program that last of the line of the NG, you'd see prices comes down, you'd have a little bit of margin pressure, then you have margin pressure on the other side as you start to bring the MAX in. From a cash standpoint, it's quite different with program, basically program accounting what you would see, but from a cash standpoint, would we expect the 737 through that transition to generate the same kind of cash returns or unit returns that we're getting today or perhaps even more.

Dennis A. Muilenburg

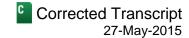
Vice Chairman, President & Chief Operating Officer



That's what we're expecting to see. And the reason this is a little different than what you might think of historically is again you look at the backlog that we have and the demand for these products. So pricing has held up very well as we built and completed the bridge to go from the NG to the MAX. So we have that basis laid into the line.

The investments that we've made in producibility for the MAX, we're also able to pull some of that forward to the NG to sustain nearer-term profitability advantage on the NG as well. Some of the wing panel assembly automation for example that we'll be using on the MAX is already being implemented in the Renton factory on the NG to both derisk it for the MAX but also generate near-term profitability on the NG. And so when we look through that transition model to model and the fact that our backlog is so strong, it's allowing us to make the long-term investments both in our factories and in our supply chain to sustain and grow profitability through the transition. And that's different than what you might have seen in the past because of all those factors I just mentioned.

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Doug Stuart Harned

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So the two things you normally would worry about would be pricing pressure on last off the line airplanes and the other one would be any complexity in getting the new airplane up to speed. If you look at those two points, did you in fact see some pricing pressure in the back part of the NG because obviously you got a lot of orders for the airplane?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Yeah, we've seen pricing on the NG hold up very well and we have in essence built the bridge. And so the value of that product in the marketplace today has held up well and the pricing has held up well even in a very competitive narrowbody marketplace. We generated some additional pricing flexibility for ourselves by driving Lean implementation into the factory which gives us some headroom on pricing as well. All of that has led to sustained profitability on that line.

And as you point out, as we look to the new model and bring the MAX on line, our ability to de-risk the MAX in the current NG line has been effective. So that's one way to mitigate that traditional risk. Also a very mindful approach to how we're doing the MAX development, the right technology that's producing value for our customers without too much technology, so taking the right size technology step here, we feel very confident with that. The performance of the airplane looks very good. The new LEAP engine as it's now up and flying, the performance looks solid.

So we expect the airplane to perform as advertised and it's going to generate 14%, 15% operating cost advantage for our customers. And the technology confidence that we have here, the technology maturity is showing as we're in the final stages of development.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

And if you look at the MAX and you think about risks there, whether it's the engine, whether it's the design development work you have to do or whether it's the production ramp, what are the things you worry about in there in the transition?

Dennis A. Muilenburg

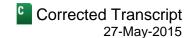
Vice Chairman, President & Chief Operating Officer

Well, we're paying attention to all of those but when we think about it, as we've implemented our new what we call development process excellence or Development Program Excellence initiative under Ray Conner and Scott Fancher's leadership in our Commercial Airplane division. And that is allowing us to share best practices across all of our development programs and that we stood up a similar development organization under Jim O'Neill in our Defense business. And that best of class disciplined development process is really starting to show benefits.

It's better reuse. It's better technology maturity. It's a disciplined gated process. And we're seeing the results of that investment now in programs like the MAX which is coming together very well, performance is hitting the mark, cost is hitting the mark, and in-service supportability we expect will hit the mark. And so our ability to now do a development in a very disciplined, repeatable way is adding confidence to our ability to bring that product to the market and do it on time.



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Doug Stuart Harned

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Now as you mentioned before, you had a lot of demand for the 777s and I think you all said you oversold in a sense, when you look at the demand picture out there right now and think about it in terms of where you see fleet growth among your customers, where you see replacement demand, a lot of people will look at this and say, this cycle has gone on too long. And I have to be ready for it to roll over. You and Airbus may be oversupplying this market. What do you all see when you look out for the next five years?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

We see long-term sustained growth. We're not seeing cyclic behavior in any way. I think what you're seeing right now is different than anything we've seen in the marketplace in the past. We see traffic growth continuing at 5% to 6% a year. That's sustained. And it's more global in nature and driven by the fact that we see a lot more passengers entering the traveling public especially in places like China and India. That's complemented with the fact that almost half of the demand generation now is for replacement demand, so not just traffic growth but replacing current aircraft because the operating value proposition that we're bringing to the marketplace with these new airplanes is so eye watering. And the fact that customers can now see 10%, 15%, 20% operating cost advantages with these new airplanes we're bringing to the marketplace, that combination of traffic growth and replacement value we see as a long-term sustained market. And it's showing is the backlog. So in previous, if you want to call them, cycles you might have seen a couple of years of backlog. Now we have eight years of production backlog, 5,700 aircraft.

In previous cycles you might have seen concentrated backlog in particular areas of the world. Now we have three-quarters worth of our backlog outside of the U.S. and Europe. So that global diversity of the backlog adds strength. These are all characteristics that are different than anything you've seen in the past and all of the demand signals we're seeing for the market, all of the production signals we're seeing in our own internal operations give us confidence that this is a long-term sustained growing market and we're being very mindful about our rate increases so that we can make this a long-term sustained growth market not one that has cyclical behavior. And that's allowing us to be very disciplined in how we're doing this rate ups and executing those rate ups successfully. And Ray Conner and his team have done a fantastic job of doing more than a dozen rate increases over the last five years. We have five major rate increases ahead of us over the next five years and we expect that to be successful as well. All of that leads us to a long-term sustained growth behavior rather than a cyclical behavior.

Doug Stuart Harned

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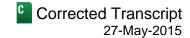
And if we focus in on the replacement side of this, we've seen you know over the last year fuel prices come down, come back up some but when you look at your customer base, what are you seeing in terms of any changes in fleet plans and strategies as oil prices have changed?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

We've seen no fluctuation whatsoever. We spend a lot of time with our customers looking at that because it's obviously an area that deserves some scrutiny something that we've been paying very close attention to, wondering how changes in oil prices might affect demand, some had speculated that lower oil prices would reduce the value proposition for new airplanes but we see quite the opposite. In fact, as oil prices have come down and moderated, it's been a contributor to airline profitability overall. Overall, health of the airline industry is at record

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levels and a profitable airline industry is able to sustain its long-term fleet plans and to purchase those new airplanes.

So we see it as a healthy part of the cycle here. I think it's also worth reminding everyone that when we launched the 787, it was launched on a business case of \$40 a barrel oil. And even at that level of oil price, the operating value equation make a lot of sense for our customers.

So we're going to continue to be mindful of that but everything we've seen to-date on oil prices and how it's affecting the marketplace, the biggest dynamic has been it's added to airline profitability which has added further strength to their fleet plans. We see no change in behavior whatsoever.

Doug Stuart Harned

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Well, one thing that is subtracted from airline profitability has been currency. And so many of your markets whether it's Southeast Asia, Russia, India, we've seen fuel and aircraft priced in dollars, fares in local currency. How have you seen currency impact demand?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Again, we've seen very little impact and it is another parameter that we've been very conscious of and thinking through how it might affect our competitive position as well as how it might affect market reaction. And we've seen very little impact to-date and I think part of that is a lot of our airline customers, a large majority are doing their fleet planning with a longer-term view as they traditionally do. And they're looking out four or five years and beyond. And very seldom will they make significant changes in their fleet planning based on currency fluctuations which tend to be unpredictable in the longer term.

So while it's again something that we're keeping a close eye on, we have not seen currency fluctuations or strength of the dollar in any way impact the dynamics of the marketplace or our customer's buying behavior.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Now your principal competitor Airbus has an advantage here to some extent with the euro with the change in the exchange rate, have you seen Airbus behavior competitively change with the change in exchange rate?

Dennis A. Muilenburg

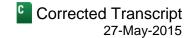
Vice Chairman, President & Chief Operating Officer

No significant impact. Again, both of us do the large majority of our business in dollars and including down into Airbus' supply chain and also as you noted, publicly, Airbus is hedged on a dollar basis for several years out as part of their disciplined approach to how they manage currency fluctuations. And so again when you look at a long-term capital intensive business like ours where you're making long-term decisions, hard to really change that behavior model based on sort of tactical currency fluctuations and again something we're keeping an eye on but not something where we've seen a significant change in competitive behavior or something that would alter our strategy going forward.

Doug Stuart Harned

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Now one of the things that's quite different this time around than we've seen in prior cycles is the very long backlog, eight years of production. And as you look forward, you've got a number of cost initiatives underway. And I would argue in past cycles what we saw is you would reduce cost, Airbus would reduce cost, you compete a lot of that away with prices coming down but right now you have a backlog priced in, effectively in most of your aircraft for five years. How do you think about cost reduction initiatives in that environment because it seems like that could all go to the bottom line?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

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So you're pointing out one of the reasons why we see the current situation as a long-term sustained growth situation for cash and earnings because we can operate on that longer backlog. So we're not being driven by a short-term behavior or a behavior that might sacrifice cost reductions in the terms of near-term pricing adjustments, right? This gives us the opportunity to make the right long-term investments in productivity, our Lean and Capture the Value of Quality initiative in our own factories is first-time quality, our development process initiative to drive stability and dependability in how we do development programs, our Partnering for Success initiative with our supply chain which allows us to do long-term win-win planning with our supply chain and doing that at the company level instead of the individual program level.

The fact that we have this long-term backlog to operate on allows us to translate those cost reduction initiatives into initiatives that will produce bottom line margins, earnings and long-term cash flow. And that's one of the very unique characteristics of the business situation that we're in right now and why we're bullish about our ability to generate cash increases year-over-year for the longer term.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

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Well, one of the pieces of this that appears to not be as strong is the 777-300ER when you look out a few years, so there appear to be a number of slots open in 2017, more in 2018, how are you thinking now about the ability to fill that bridge out to the 777X?

Dennis A. Muilenburg

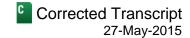
Vice Chairman, President & Chief Operating Officer



Look, Doug, our confidence in building that bridge is actually increasing and we're seeing it in the marketplace. As we said, over a roughly five-year time period, we need to sell about 50 aircraft a year to fill out the bridge. Last year, 63 were sold. This year, we've already got 25 firm orders and commitments and expect to meet that target again. 2016 is sold out, 2017 is roughly half sold, 2018, we have a number of serious campaigns around the world that we expect to be able to fill out the bridge. We're also seeing that pricing for the 777-300ER is holding up because of the unique value of that airplane.

But the fact is if you look at — if you want, need a 365 passenger airplane in that 2017 to 2019 timeframe, 777-300ER is the only airplane that will satisfy that need. So it's in a very strong market position. It's an airplane that's well understood and very dependable and one that we know to build and customers have confidence in it. So what we're seeing in terms of demand buying behavior, our ability to build that bridge, continuing to see increases in confidence. And we're also using that to our advantage to pull some of the technology investments from 777X forward into the 777 line to further de-risk them and to take additional cost out of the 777 to give us pricing headroom if needed, things like the upright fuselage build, automation that we're putting into the fuselage, this will take what is today about 60,000 passengers in the 777 fuselage that are put in by hand and we'll automate that. Now you can imagine what that does to efficiency in the factory place, in improved safety, creates a better

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environment for our workforce as well, de-risk the 777X, takes cost out of the 777 – all of that just further adds confidence to our ability to build the bridge.

Now we still have work to do to complete the bridge building but I would say over time our confidence and our ability to do just that is continuing to grow.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

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I want to get into that, transition a little bit more on the 777X but first, on filling that bridge, one of the places that we have looked at as a real possibility not just for this airplane but for others is China which in our view has been heavily under ordered based on the planning we expect them to do for the fleet. Is China likely to be a source here of 777s or you just had a 37 order but more...

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

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Yes, and you've also seen 777 orders in China. And certainly it's a marketplace where widebody demand is very significant. If you take a look at our current market outlook for roughly 37,000 aircraft over the next 20 years, about 6,000 of those are in China. And a good portion of those would be wide bodies and if you look at the route structures and where we see the traffic demand going – both traffic and cargo – 777 and 777X are going to be very well suited for that. And so we believe that China will continue to be a very important widebody market for us.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Yeah, Airbus has been working heavily to sell the A330 in China. We haven't seen I think the progress that they had hoped on that airplane. What gives you confidence that 777 is going to be able to do better than they've...

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer



I think it's clearly a superior value proposition for the 777. No matter how you slice the A330 or A330neo, the 787 and the 777 depending on where you want to match them up in competitions are going to provide 10% to 15% to 20% operating cost advantage. So there's superior value in the product.

I also think our industrial relationships in China, the work we're doing with our supply chain there, the capacity that we're helping them to build in terms of the overall aviation infrastructure capacity, broadly our partnership in China is another key element of our success there. And we've committed to a long term presence and partnership there combined with the right product mix and our ability to partner with the local industry. I think that's part of why you're seeing us be successful in the marketplace.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC



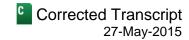
Although I think Airbus would argue they've done a lot on the partnering as well in China. Is there a timeframe when you're expecting ordering to increase, and I would say it's increase either for you or for Airbus, are you seeing a timeframe that you expect China to really move and [ph] fill ways (33:25) a relatively small backlog today?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

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Yeah, I won't offer specific timing but typically orders in China will come in waves aligned with their economic planning. As you point out, we see the demand signal is very strong, the market is growing. We have the right product mix and so timing will play out as it plays out but we have a number of strong opportunities there and we do expect that to be a long-term growing market for us.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Okay. And then on 747-8, this one not a real high production rate right now, how do you see that going, what production rate – I think you're 1.3 a month today?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Yes, we're stepping down to 1.3 in September. We think that's a long term sustainable rate for that line. It is a niche market so we don't see that as a significantly growing market segment. We have seen some returning strength in the cargo market this year which gives us some confidence for the longer term. If we had to go down to 1 a month on that line, we could and it would still be profitable. So it can be a good solid profitable line for us at roughly the current rate.

It does serve a unique need. It's about 15% larger than a, equivalent to, than a 777 freighter. And in that size class, it is by far the most efficient airplane available. So a niche marketplace but one that's important to us for the long run.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

And then on bridging to the 777X and I'm asking this more in terms of investment because there is a history in this industry of spending a great deal of money developing a new product takes a little longer to get out than you think. This is obviously, it's a derivative but a fairly substantial derivative. It appears that a lot of the investment this time around it's more front-loaded. You mentioned the automated fuselage line. So if I look at some of the demand – on cash, from a CapEx standpoint, can you sort of walk through the timing of investment CapEx for the 777X, 787, the MAX, how should we think about that over the next few years?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

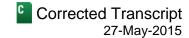
You're going to see a much more stable profile than what you might have seen in the past. Part of this is the outcome of that new Development Program Excellence initiative that we put in place to take the right size technology steps at the right time and 777X certainly represents that. And while we're bringing the all-new composite wing to the airplane, it's our fourth generation composite wing as an example, so leveraging existing technology.

Our R&D spend this year including both commercial and defense, about \$3.5 billion, we expect to see that grow very slightly next year as we get into the meat of the 777X development. That will moderate a little on the back side of 2016 as we complete the MAX and the dash-10 development but a good stable profile over that timeframe, similar profile in the Defense business where we tried to sustain our investment in innovation and fueling that with some of the cost reduction actions we're taking in the Defense business.

CapEx, similar. As you pointed out some of the CapEx on the 777X is front-loaded. This includes the new factory space for our composite wing manufacturing facility, for example. And that again will begin to moderate as we get



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two or three years out in the planning period. But overall, if you sum that up, you should expect to see a good stable R&D profile. It's important to us that we continue to invest in innovation for the future but also do that in a repeatable sort of disciplined profile so that we can produce the results that all of our stakeholders expect

Doug Stuart Harned

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Well, I've got a few questions here that focus on one particular issue from different angles and it's financing. So when you look at demand out there today in the market, we have an increasing percentage of operating leases out there, lessors are playing a bigger role. There is the risk that interest rates could go higher and then even something that was in the [indiscernible] (37:55), the Ex-Im Bank. When you look at the financing aspects of demand, how do you think about it?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Well, it's another thing we keep a close eye on. I will tell you that as we run sensitivity cases on financing availability, interest rates, we don't see it as a big mover in terms of our business. Again, as we talked about before, we look at oil prices, we look at currency fluctuations, we look at the financial market. The third one, interest rates, really not a big mover in the marketplace for us in terms of sensitivities. Right now we see very sufficient capital in the marketplace available for financing. Ex-Im Bank reauthorization has gotten a lot of political attention, one that we think is a very important topic to United States given that all other countries that operate in the aerospace sector have export credit agencies. We don't understand why the U.S. would unilaterally disarm in export credit. We think it's something that clearly creates U.S. jobs and is clearly beneficial to the country overall and it's good for business.

So we're advocating reauthorization of Ex-Im but if you step back from all of that and look at fluctuations in currency or interest rates or availability of credit, right now, we're not seeing that as a constraint on our business and we're not seeing it create any demand signal changes.

Doug Stuart Harned

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And you're not concerned at all that your backlog may be less robust if more of it is controlled by lessors?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

No, we're not. In fact, the quality of our backlog is another thing that we like about it. And I mentioned earlier that the duration of the backlog is a big advantage, the eight years, the global diversity of it with three quarters of it outside of the U.S. and Europe is a big advantage. And we also look at the quality of the backlog. The customers across all types of customers including lessors, the quality of the backlog and the content of those orders we feel very strong about. So all of those dimensions how we think about quality of backlog are in a strong position.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

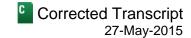
Well, if we switch gears here over to defense, if you look out over the next three or five years, do you think that you can keep the top line stable or even growing in BDS?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

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Yeah, we take a look at our Defense business, we're in the low \$30 billion range today in terms of revenue. We look out over the next three to five years, we see that top line being flattish to slightly growing. Opportunities continue to come out on the international defense front, in particular. Over the last five years that business has gone from being 5% to 10% outside of the U.S. to now about a third outside the U.S. that has added some growth opportunities for us.

But even with that flattish top line, we're continuing to take out cost on the bottom line which is sustaining and growing margins and earnings. So we see that as a strong, healthy core business for us over the long run. We're also hopeful in the U.S. that there are some signs of I'll say compromise on the defense budget alternative to sequestration. We're obviously strong advocates of that to find a better approach than sequestration. We do think budget compromise there with increasing defense investment is a feasible outcome potentially, a Ryan-Murray 2.0 kind of budget deal. That would add some opportunity for top line growth. There is also a couple of key franchises that we're competing for with the new long range strike bomber [ph] T-X (41:48) as examples there. And we're investing to win those. All of those create some top line opportunity but overall we see that Defense business is a good stable element of our portfolio and something that allows us to again build talent and share talent across Boeing. And I think that One Boeing approach across commercial and defense is a unique strength that our enterprise has that's unmatched by anybody else in the world.

Doug Stuart Harned

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Now you mentioned LRS-B, [ph] T-X (42:18) there are others [ph] GMR (42:20), there is [indiscernible] (42:22) when you look at that stable, that flattish outlook what assumptions do you make in that with respect to your ability to win those programs?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer



Well, we will typically de-risk that assumption by – we're not assuming we're going to win them all but we would expect to be able to sustain our market share. And we're making very targeted investments to increase our probability of winning those opportunities. It's also important that we continue to invest in our core production line. So as you're well aware we're closing down the C-17 production line this year. That will add downward pressure on the top line. Offsetting that the P-8 program ramping up, tanker program ramping up. We fully expect tanker to ultimately be 400 to 500 aircraft instead of the initial 179 – that creates a long-term growth that will more than offset C-17.

Extensions to our fighter lines, as challenging as that might be, we're seeing continued good prospects there for both F-15 and F-18. Our helicopter business across Chinook, Apache, V-22 remains strong, satellites are growth business for us. In our core business as well, we see more growth opportunities than downside opportunities in terms of top line. And between the core and these new franchise opportunities and international expansion that's what gives us confidence that we should be able to see a sustained healthy Defense business for the long run. That as a complement to our Commercial business is a great portfolio combination.

Doug Stuart Harned

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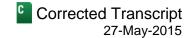
A question I'm getting multiple times is Sikorsky a business that fits with Boeing defense?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer



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Yeah, again Sikorsky is a good partner of ours. We worked with them in a lot of areas. We do some worldwide rotorcraft support with them. We're teamed on a Future Vertical Lift program for the U.S. Army. So a very respected partner and competitor in many ways but our primary growth engine is organic growth investments and that hasn't changed and if you take a look at how Boeing will grow over the long run, we're going to focus on organic investment. I've mentioned the commercial product lines that we're investing in, the targeted defense investments that is our primary growth engine.

M&A opportunities we continue to survey the marketplace where we can find bolt-on acquisitions that fit with our strategy and complement our organic investment. We'll do that and continue to do it but we see M&A activities as something that's a complement to fill out gaps in our organic strategy. Our organic investment strategy is our primary growth engine and we expect that continue to be the case.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

When you look at the evolution particularly Boeing Military Aircraft, you've gone from some very high margin programs from the C-17, the F-18 to the P-8 to the tanker which at least appear to us in the early days are not the same kind of margin levels you've had in the past. So how do you see margins progressing over time in BMA, what can you do to bring those up?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Well, we see margins in BMA being steady to growing. And you've seen evidence of that in the number to-date. A couple of factors, and admittedly C-17 and F-18 two long-term production lines that have really driven production efficiency and are profitable lines. P-8 is now in the early end of production. And as that production system matures that will be a very healthy profitable line for us and tanker as we get it into production will be the same. And admittedly some challenges that we've had in the development program and cost and schedule pressures that we're aware of. But we fully expect that tanker when it gets into production and we have the opportunity to drive a decade's long production system, will also be a very profitable machine.

So I think you are looking at production lines that are at different stages of their life. And the new production lines as they come on should be profitable for the long run. We're making the right kind of Lean investments as well to drive that long-term profitability. And our market-based affordability initiative that underlies all of the Defense business, we've taken out about \$5 billion of cost structure out of defense over the last few years, committed to take another \$1 billion out that cost take-out effort regardless of top line will drive bottom line performance.

Doug Stuart Harned

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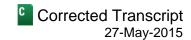
This is switching back a little bit here but we were talking basically a little bit about the competition with Airbus, how do you envision over the next several years the potential of new entrants whether it's Bombardier, COMAC [indiscernible] (47:43), how do you see that playing into the mix?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Well, a couple of things to think about there and really in two segments, so widebody and narrowbody. In a widebody marketplace, we're in a very strong competitive position today and have market share leadership and we think that's sustainable and growing leadership. When you look at our lineup of the 787-8, -9 and -10 and the

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777X, -8X and -9X those five aircraft with roughly 15% separation in [ph] seat class (48:00) between them cover that whole widebody range with advanced technology.

Narrowbody tends to be a more competitive marketplace roughly 50%-50% today with Airbus. We're working hard to sustain and grow market leadership in that area but narrowbody is where we expect to see additional entrants coming in. Traditional entrants in the forms of Bombardier, Embraer as you've noted. And also we know China will be a competitor in that space. COMAC rolling out the C919 in the near term as an example. And we understand that in China, we will both cooperate and compete with the aerospace industry there.

We think that competition makes us better and while we see new entrants coming into the narrowbody marketplace, it doesn't assume, it doesn't mean that we're going to stand still. We're going to continue to invest in innovation and that's I mentioned earlier it's important for us as a company to continue to innovate in how we design, build and support. And so as new entrants come in, that's how we stay ahead. And those new entrants are going to make us leaner and meaner but we're not going to slow down and we're going to continue to invest for the future.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Well, I know we need to wrap up now. Perhaps we could finish with tell me the two or three things you're going to focus on over the next two years?

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Well, so a couple of things. Over the last year, year and a half in this position I've the real privilege of spending a lot of time with Jim McNerney and learning a lot from him and sharing oversight of the company with him. So that learning opportunity has been very important and something that I'll continue to leverage, really focusing on driving some of our One Boeing enterprise-wide efforts, initiatives around Lean implementation, productivity, Partnering for Success, development programs that will be a key focus for us and then engaging with our stakeholders globally and including our shareholder community. And then wrapping that all with the fact that we have just this incredible business opportunity ahead of us here. If you look at the backlog and the ability to execute that backlog and turn it into cash and returning value to our shareholders and all of our stakeholders and we will be very focused on successfully executing that.

Doug Stuart Harned

Sanford C. Bernstein & Co. LLC

Well, great. Well, Dennis, thank you very much.

Dennis A. Muilenburg

Vice Chairman, President & Chief Operating Officer

Well, thank you, Doug, I appreciate it. Thank you.

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