02-Jun-2016

The Boeing Co. (BA)

Bernstein Strategic Decisions Conference

CORPORATE PARTICIPANTS

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

OTHER PARTICIPANTS

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

MANAGEMENT DISCUSSION SECTION

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Good morning. I'm Doug Harned, Bernstein's Aerospace and Defense Analyst. And this morning, I'm very pleased to have with us again the Chairman and CEO of Boeing, Dennis Muilenburg. Dennis has a few words to say and then we're going to go into a fireside chat format. As I think you all know, as you have questions, please put them on cards and send them to the middle.

And with that, Dennis.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

All right. Thank you, Doug. And good morning and good to be here with you. Thank you for taking the time to join us. Let me just make a couple of really brief opening comments, give some context, and then we'll – happy to jump into the questions.

First of all, I know many of you were at our investor conference a few weeks ago, and we see the fundamentals continuing to be very consistent with what we talked about there. The underlying aerospace market is a strong one. Commercial aircraft market paced right now by global passenger growth, continuing to run at about a 7% year-over-year growth rate. Some month to month variation in that but we see consistent strong market growth there. Defense budget returning to some strength in the U.S. with some good support for our programs at Boeing.

So, underlying market strength remains solid. Backlog continues in a unprecedented position, about 5,700 commercial airplanes in backlog. That allows us to do the long-term planning, ramp up, supply chain design that we want to do. That combination of strong market and unprecedented backlog position create the foundation for our plan. That plan, we see growing top line fundamentally over the next several years, principally driven by commercial aircraft as we go from mid-700 aircraft deliveries this year up to well north of 900 aircraft deliveries over the five-year timeframe.

That includes well defined production ramp-ups across our production lines that we've already announced, that's based on firm backlog. And during that time period, we'll also be rolling out 737 MAX, the 787-10, and the 777X.

So, a refreshed fleet combined with ramp up in production. That will drive top line growth. That's complemented by a clear focus on productivity and bottom line growth, our initiatives around Lean Plus, capturing the value of quality, partnering for success in our supply chain. Those are commitments we've made. We've doubled-down on those. We expect those to drive earnings and cash while we grow top line in parallel.

All of that turns into a growing cash machine. In particular, we've returned or delivered $29 billion of cash over the last three years. We've guided to $10 billion for this year, remain confident in that guidance. And we expect year-over-year cash growth going forward. And we will deliver and return cash to our shareholders. 125% dividend increase over the last three years. We've repurchased 150 million shares during that timeframe as well. We still have $10.5 billion of share repurchase in our authorization that we expect to execute. And as we announced at our Investor Day conference, we expect to return 100% of free cash flow to our investors through a combination of dividends and repurchase.

So, strong market, unprecedented backlog, we see top and bottom line growth, and a strong cash return to our shareholders. So, that's the foundation for the discussion here.

QUESTION AND ANSWER SECTION

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Great. Thanks, Dennis. It's been nearly one year since you became CEO.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

If you look over the course of that year, how have your perspectives changed on the company itself and the priorities?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. Well, hey, great question, Doug. I'd say, first of all, I got a great handoff from Jim McNerney. And the transition, I think, was executed smoothly based largely on a lot of the planning that he did,. A lot of confidence in the team that we've got in place with Ray Conner and now Leanne Caret running our BDS business. We've changed some of our functional structure to further strengthen that. As I've announced over the last few months, we've elevated a few positions around supply chain, operations and engineering that now report directly to me as to further drive productivity and performance.

And I would say we've strengthened our One Boeing fabric. It's something that we've been committed to, let's say, a journey we've been on for several years under Jim's leadership. And during the last year, something that I've really been emphasizing, and I'm proud to see the progress we've made on that One Boeing front. I think it's part of what drives growth and productivity and differentiates us in the marketplace.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Now, in your first remarks you mentioned the strong cash trajectory that you're expecting. And you guidance is for about $7.3 billion in free cash flow this year. I think you said, previously, you expect that to be up successfully each year going forward in the next few years. Can you talk about, first, how we should expect the cadence of that cash to be over this year? And then what are the elements that are actually going to drive that cash up in the successive years?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. Well, first of all, as you look at cash for this year, as we said, we've guided to approximately $10 billion of cash this year. We came out of the gates in the first quarter with solid cash performance. Normally, first quarter is our lowest cash quarter of the year, which we expected to be the case this year as well. And to a degree, we over performed on cash in the first quarter. I think that reflects some of the initiatives we've put in place to drive cash management across the business. So, you'll see us continuing to execute on a steady pace through the remaining three quarters of the year and still confident that we'll hit our guidance for the year.

As you look at cash performance beyond that, as I said, a great opportunity for us to consistently grow cash year-over-year. And I would see this as a profile that's not a hockey stick kind of profile, but more of a linear profile of year-over-year cash performance improvement.

Principal drivers behind that include commercial airplane volume. So this is the committed backlog and the rate ramp-ups that we have as we take 737 from today's 42 [aircraft] a month to 47 a month, 52 a month and then 57 a month in 2019. That is based on committed firm backlog, in fact, an oversold position. So, that rate ramp-up alone will drive cash performance

We're also ramping up on 787. Didn't get a lot of fanfare, but we talked about ramping up to 12 per month. We're now 12 per month. In fact, we delivered the first 12-per-month airplane to JAL during this past week. And didn't get a lot of fanfare because the ramp-up – the rate break was very smooth. And so, again, that indicates good prospects for the future, so driven by commercial airplane production ramp-up.

The other big driver on that cash profile is the 787 program itself, not only the rate ramp-up, but as we turn that deferred production inventory into cash. And as we talked about at our Investors Conference, that deferred production inventory, about 70% of that is based on advantageous pricing and mix going forward. It's already committed. As we go to more dash-9s and dash-10s in the 787 delivery profile, we're no longer paying penalty fees for late airplanes.

So, all of that pricing advantage, that is 70% of that – turning that deferred production inventory into cash. Another 25% of that is in the supply chain, and those are based – about 85% to 90% of that 25% is already committed in supplier agreements.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

So, those are negotiated. You've already got negotiated [indiscernible] (08:12) that will...

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

That will ultimately show up in the numbers. And the remaining 5% is incremental productivity work internally, again, that we're committed to doing. So, the fact that we've got commercial rate ramp-ups ahead of us and that, in particular, we're going to be driving cash performance on the 787 program, those are two of the biggest drivers to accelerating cash performance going forward.

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

Now, one thing that's been in the news quite a bit in the last few days has been the Air Force tanker.

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

Yeah.

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

That's obviously been a very challenging program. My impression, and I think many people's impression coming out of the investor conference, was that it's pretty much set. But now, we're hearing about a delay in the delivery profile. Could you please give us a sense of what's happened there?

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

And let me just take that one head on because, as a community – and we've been talking about the tanker program for some time, and it's been a challenging development program. I think two points of context we're starting with. One is we are in the middle of a flight test program, and we do discover things and fix things as part of flight test. That's why we flight test. So, the issues that we're dealing with now are part of that normal progression.

I will also say that we're now very clearly at the point in the program where we're not discovering new technical issues, and I said this at the investor conference as well. What we're dealing with now is [ph] as we finish that (09:34) flight test, we are concurrently completing development and rolling any incremental changes into the production aircraft. And that does cause some schedule impacts as we get through flight test resolution. That concurrent approach, we think, is, by far, the best answer for the company, our customers and our shareholders over the long run. But it's important to note that that's the context we're in. We are not discovering new technical issues, and what was announced by the Air Force last week is not a new technical issue. This is how we deal with it in the production system.

So, two key milestones that have changed. One is Milestone C. That is the Air Force's approval to proceed with production, production contract authorization. That's moving from June to August. That is paced by one issue and that is the boom axial load issue that we talked about at the investor conference. Think of [ph] it as a (10:30) refueling boom that connects the tanker to the receiving airplane. When there are two heavy airplanes, it causes compression and extension on that boom. We have to get the boom tuned just right to perform in flight test.

We had a software solution that we were hopeful was going to work. We had a hardware solution as a backup. We talked about that at the investor conference. Since then, we've tested the software solution. And while it worked to a degree in flight test, it wasn't as robust as we wanted. So, we've decided to go with the hardware solution. It's more robust for the long run. It does cost us two months to get to Milestone C.

Now, that said, that's not slowing down our production program. So, while we look forward to getting those first three production contracts authorized, we are continuing to build the production aircraft. So, financially, those airplanes remain in flow, and we now have five in flight tests, seven in final production and eight in the supply chain. So, up through tail number 20 now flowing through the production system.

That gets us to the second change that was announced last week and that is, when will the first 18 airplanes be fully certified and delivered to the Air Force. Our plan was to get that done by August of 2017. That was the original plan. We will still have those 18 airplanes on the ramp August 2017. They won't be completely certified. The first one will be but the 18th one won't be certified until January of 2018, a few months later. So again, an incremental impact to schedule. We'll work through the local financial impacts of that and cash timing of that, part of our normal financial process. So, that analysis is underway.

But the fundamental importance here is that the underlying production system [ph] now (12:21) is there. That's no change from the investor conference. We're still building airplanes on pace. And as we discover things in flight tests, we have to concurrently roll those into the airplanes. That will create pressure as we finish up development over the next year. But stepping back from that from a shareholder standpoint, it is a big production program. 179 production aircraft minimum. We think the production run will be north of 400.

This will be a wide-body production program for decades, and decades of support and training to follow. And that, really, is the value proposition for the company and the value proposition for our shareholders. And we remain very, very confident in that. No change in my [ph] head set (13:07) on that at all from the investor conference.

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

And you did say few minutes ago that the cash guidance, the cash ramp and the guidance for the – cash guidance for this year, you said that is all still intact. Am I to assume that includes [indiscernible] (13:22)

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

We're still driving to our $10 billion cash guidance. As I said, as part of our normal process, we'll work through the financial analysis of the tanker program itself. And the fact that we're not discovering new technical issues, this is about how we most efficiently deal with concurrency as we wrap up development and get into production. I think it's incumbent on us to get this program into production as soon as we can. That's the right thing to do. And while it makes the tail end of development more difficult, in the long run, I think it's absolutely the right answer.

And the issues that have come up over the last couple of weeks as we've been testing this boom solution, it's having an incremental impact on delivery certification timeline. We'll deal with that reality. But in the end, this can be a great long-term, multi-decade production program.

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

Now, I've got about five questions here are different flavors of the same thing.

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

Okay.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

And it has to do with pricing on the commercial side. So, you're in an interesting situation today where when we've looked at this, you've got about 80% of your deliveries through 2020 and maybe more already sold and priced. But you see a lot of things in the press about very aggressive price competitions between you and Airbus and potentially you and Bombardier. Can you talk about what the pricing outlook is, the nature of the competition today in an oversold position, particularly on the 737, why you would be aggressively pricing – you or Airbus for that matter?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. [ph] Right (15:03). I think the context here is one that – there's a piece of it that's [ph] accurate (15:08), that is it's a competitive environment, right? And it remains a very highly competitive environment. Narrow-bodies is right now about a 50/50 marketplace. And we have other potential future competitors that want to get into that marketplace. This is an attractive market that's attracting competition.

Now, we're not afraid of competition. We like competition. It's good for us, makes us better. And that competitive environment should not be a surprise to anyone. Now, does that mean that we're having to reduce pricing dramatically to close deals? No, because we don't have to chase market share, right? We're not going to pursue market share just for market share's sake because as you well pointed out, that the bulk of the backlog, the 5,700 aircraft that we have in backlog, is already firm and committed deals. So, we're talking about building future backlog. And we want to continue to build at about one-to-one, book-to-bill rate year-over-year. And we think we're on track to do that again this year.

And so, while it's a competitive environment, it's not one where we have to make bad financial decisions for market share's sake because of the strength of the backlog we have. So, the way I like to think about it is that competitive environment is causing us to drive our own internal performance, to drive productivity, to drive the supply chain, all the things I talked about. And why are we doing that? There's three things we need to do.

One, we want to have pricing headroom in the market when we need it, to your point. Two, we want to be able to invest in future innovation and R&D, and meet our commitments there. And three, we intended to return value to our shareholders. And it's important for us to do all three. And we would be driving productivity and competitiveness regardless of the pricing environment. And we will continue to drive it because it's a good way to run a business for the long term. And we can have balanced [ph] head set (17:03) about how we deal with pricing pressures in the marketplace.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

But what is interesting to me about this is you've got an aggressive cost reduction effort going on across the company. Now, some of that has been described as something you need to complete effectively [ph] as (17:22) Airbus is a tough competitor. Certainly, where you're most head-to-head is on the A320 versus the 737. So, if I think about cost reduction, there are two pieces to this. One is I would expect the cost reduction to all drop right to the bottom line in the next five years on the 737 if things are priced generally. But when you go beyond that, then you're doing a lot of – you're in a lot of these competitions. So, can you characterize, if you have to compete aggressively against Airbus on price, what's the timeframe that we should expect that to impact the company?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Well, the way I look at it, Doug, is I look at it from the other direction, is that we have set in a commitment and a goal that we're going to grow margins over the long run in this company. So, we're going to return commercial airplanes to double-digit margins next year. We've set an aspirational target to be a mid-teens margin kind of business towards the end of the decade. We have to account for all of these competition factors, whether it's the fact we got near-term, full backlog or actually overcommitted production line positions, or we're competing for future backlog. That's all done in this composite of overall increasing margins across the company.

So, where we might see future pricing pressure, I wouldn't look at this as something where you're going to see the nature of the financial outcome overall changing significantly. Our plan is to grow margins year-over-year consistently going forward, and that kind of dependable, stable performance. We'll have to deal with the realities of pricing pressure further out. We have to create our investment capacity further out. But we need to consistently return value to our shareholders. That means consistent cash and earnings performance. So, that's our [ph] head set (19:14) around driving cost reduction today and tomorrow.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Now, when you talk about the aspirational goal, mid-teens margin, and I think you [ph] all said sort of (19:25) into the decade 2020 timeframe. Aspirational is one thing, that's far above what we expect you to do. How do you get there? What are the things that can take you from the level today to something like a 15% margin at BCA.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. The key is we're going to work every dimension of our cost profile. And I'll admit right upfront that that is – it is an aspirational target, as we said, right. It is a high bar. But I'm a big fan of setting a tough high bar to drive performance because our future competitiveness depends on it. And driving towards that aspirational target is an important fundamental.

You're going to see it show up in several places. One is incremental productivity improvements across all of our programs, so our initiative around Lean Plus and getting that into the factory spaces and office spaces in addition to the factory. Our initiative around capturing the value of quality, first-time quality in everything that we do. Development program excellence. Now, this is consistent, reliable R&D performance and a steady R&D profile. Partnering for success with our supply chain. We're entering now wave two of what we call value engineering with our supply chain. We've got more than 2,000 ideas in the pipeline that our suppliers are now providing on how we can take cost out and find win-win solutions. All of those productivity investments are going to incrementally drive margin performance.

You're also going to see, as we get to the better mix of airplanes, the 787-9 and 787-10, those give us more opportunities than the dash-8 because they're easier airplanes to build. As we get fully up into the MAX ramp-up and complete the 737 transition from NG to MAX, that will be additive as well. So, it's not any one thing. It's a host of incremental things, all of which are being run as a drive towards market-based cost competitiveness.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

On one program that I know you're clearly looking for more orders on is the 777.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Can you talk about where you stand now? I think you said we're going to see 7 per-month production dropping down to like 5.5 per-month production or so for deliveries in – sometime in 2018 and into 2019. Can you talk about how many orders you think you need, where you stand in getting those orders?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. I take a look at 777 bridge, that's one of the most important risk areas that we're trying to manage as a business. So, we're being very focused on filling that bridge. We still believe we need to make about 40 to 50 sales per year to fill out the remainder of the bridge. We've got 12 that have been accomplished so far this year. So, a step towards the 40 to 50. We've got 10 to 12, I'll say, very credible, significant campaigns underway. And so, our expectation is still that we will fill that bridge.

That said, we're seeing some hesitation in the wide body marketplace right now that we've all talked about. And so, that's causing us to just continue to lean forward on trying to drive to closure on those campaigns. We are sold out at our 8.3 a month rate for this. We're about 80% sold out in 2017 against a 7-per-month delivery profile. Most of the remaining slots in 2017 are towards the back end of the year, so that's heavy concentration right now.

And then, during 2018 is when we have to do our principal [ph] work yet (23:11) on filling the bridge. As you pointed out, we'll be running the production system at seven a month during 2018, but we'll be building six 777X test airplanes that year. And we'll also have some extended flow times in the production line as we move from 777 to 777X. So, the net effect in terms of deliveries will be about 5.5 per month in 2018. All part of our overall financial plan.

So, we need to sell to that 5.5 month delivery profile. And that's where we're focused right now is finishing up 2017 and filling out the skyline in 2018. And as I said, we do have 10 to 12 very credible campaigns under way with strong customers and we're continuing to drive hard. This is not without risk and we've got work to do yet to fill up the bridge. But we also think the game plan we have in place is the right game plan. And that we'll be able to successfully transition the production of 777X and pulling some of the automation forward that many of you saw during the investors conference to help make that transition a smooth one.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Now, in trying to close these deals though, I mean it's normal for last-off-the-line airplanes to come in with lower pricing, in most cases. When you head into trying to fill this bridge, how do you look at price concessions, and is this something that, on the program itself, should we expect some contraction in margins as you try and sell these [ph] latter lots (24:41)?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

We anticipate 777 margins holding up pretty well through the transition. Yeah, there's some local pressure. I will say, right now, as we look at 777 bridge building, it's more about just the overall market demand and some hesitation in wide-bodies in general right now, not so much because we're seeing pricing pressure against our product line.

The 777-300ER is still a unique airplane in that 365-seat class. And so for customers that are trying to buy that kind of capability, the value proposition for the airplane itself remains very strong. So, to me, this is more about overcoming overall market hesitation right now, rather than what we're seeing as extraordinary pricing pressure. There is some pricing pressure, but I think that can be largely offset with the productivity work we're doing. It's one of the reasons we're pulling automation in that line forward.

So, what you saw in that fuselage upright build in Everett a couple weeks ago, that kind of automation is allowing us to take more cost out the current 777 line, while we also derisk 777X. And that cost takeout in the current line is allowing us to offset some of that pricing pressure in terms of retaining margins. So, we expect that program overall margin during the transition to remain strong – some pressure but within our financial plan.

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

Now, as you said, there's been some pressure on wide-bodies and I think both you and Airbus have felt this. On the 787, you're 12-a-month...

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

Yeah.

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

My understanding is you're sold out at that through the decade. But you've talked about going to 14-a-month. We've never heard much specificity about when that would happen.

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

How do you think about that move now?

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

Yeah. 14-a-month is still where we're headed in terms of, as we said, towards the end of the decade. And we haven't precisely defined the timing on that yet because it's dependent on how we [ph] thought (26:42) the skyline. Again, there are a number of 787 campaigns underway, that the skyline [ph] help (26:47) on 787 is very good. And so, at 12-a-month, as you said, we're in very good shape. As we're making incremental sales now, that will drive our timing when we go to 14-a-month.

And that is a decision we don't have to make right now. We understand the lead times. The fact that we just very successfully went from 10-a-month to 12-a-month, you could think of that as a good practice step for going to 14-a-month, so we know how to do it. We know how to do it in our supply chain. We know how to do it smoothly, and that gives us confidence in our lead times. So, we still have time before we need to make that decision as to exactly when we would go to 14-a-month, and that will be dependent on how successful we are in some sales campaigns over the next year or – year or two.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

Now, related to this, I've got several questions here tied to program accounting.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

And two things on it. One, given the way program accounting is done, you've got a very large deferred production number, when should we start to see this really come down?

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

That's the first part of this. But the second part is how do we get confident that the numbers are right? In other words, that you've been able to predict the costs going forward so that people could feel pretty good they're going to get all that cash back, when we aren't even sure when that 14-a-month increase is going be.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. Well, so, first of all, the fundamentals, the financials, we're very confident in the numbers that we published [ph] and in our (28:26) accounting. Program accounting is a GAAP-approved approach. It's the way we've always done business. We just filed again for the year our 10-Q and 10-K. We stand firmly behind those financials as do our independent auditors. So, questions around program accounting, while we appreciate the questions, this is not new for us, right. This is the way we've always done business. We're very confident in our financials. We stand behind our numbers without any question. So, that's really the second part of your question.

If I go to the first part of the question, on deferred production inventory, that profile is, as we've talked about before, we expect that to plateau this year. So, we said on the back side of going to 12 a month on 787, we expect to come down the back side of that deferred production inventory profile.

You saw in the first quarter of this year that that inventory growth was, again, flattening out. I think it's in the neighborhood of $150 million to $200 million in the quarter. You're going to see that further flatten out in the second quarter, and you'll see it plateau and now coming down the back side of the curve in the latter half of the year here.

And then, as we get into 2017, you're going to see us move down the back side of that curve as we're fully up to 12 per month production rate. And our confidence in moving down the back side of that curve is based on what I mentioned earlier. 70% of that based on pricing, committed backlog, mix associated with 787-9 and 787-10 committed deals and another 25% of that already baked into the supply chain.

So, now, this is just about keeping the production system running and delivering airplanes on schedule. The fact that the production system is healthy and running on schedule now gives us confidence that we're going to come down the back side of that deferred production inventory and turn that into cash. That is one of the biggest cash levers we have in our hands here over the next two to three years.

And we have very clear line of sight to it. We look at it every single line number that's running through the production plan, and we see that showing up in the flow improvements, in the unit hour improvements, airplane by airplane. All of the productivity initiatives that we talked about, you're seeing those take hold in the 787. So, our confidence in being able to execute that is strong, and we will be turning that deferred production inventory into cash over the next three years.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC — Q

Now, there are a couple questions here on Iran, something we've talked about before. I mean you've now got – you now have a marketing license from the Commerce Department, Airbus' [ph] sort of a (31:08) letter of intent [ph] at least (31:10) for 118 airplanes. How real is the potential of Iran? Because it seems like that could solve a lot of the bridge issues.

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

So, the market opportunity there is substantial. And as you said during the last month, month and a half, we got our first license to do the market analysis. We've had a couple of conversations with airline customers there. We can see the market demand is real. It spans both narrow-bodies and wide-bodies. And while I won't put specific numbers on it, you saw Airbus' announcement around 100-plus airplanes, Notionally, we see market space that's measured in that category. And the fact that these [ph] are innate (31:56) country-to-country agreements that span the U.S. and Europe, you could anticipate that that's potentially a 50/50 kind of marketplace for Boeing and Airbus, and we're going to battle it out competitively.

Any specific deals are still subsequently subject to U.S. government approval. So, the way the licensing process works now is we're allowed to now put together tentative sales agreements. Those sales agreements would then be each individually subject to U.S. government approval. By the way, Airbus will be subject to the same thing as they have a lot of U.S. content on their airplanes. So, that's the next step in the process.

So, we see a market opportunity there. We're going to stay completely within the U.S. government process. And while it's an opportunity, we're not going to depend on it, right. Our plan right now is a plan that we execute regardless of what happens in Iran. If we're successful in Iran, it creates some upside.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC — Q

Going back to the 737, can you talk about the MAX.

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

Yeah.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC — Q

Where the MAX stands, it seems like you're ahead of schedule on that. But then also, there's a lot of talk about the competitiveness of the MAX 9 versus the A320neo. Maybe you can address those.

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

Yeah. First of all, on the MAX itself, this program is going very well. And it's really the first new development program that we put end-to-end through our development program excellence initiative, which was intended to crispen up our development program performance and deliver on cost and schedule. We got all four MAX test aircraft in the air now, more than 400 flight test hours. Airplane looks good in the air. Production in the system is maturing nicely as we fold it into the ongoing 737 line at 42 a month. That ramp up is going well.

We have committed to delivering that airplane to customers by third quarter of 2017. As you've seen, we now have the opportunity to do that earlier. We have some customers that are now talking to us about their desire to get airplanes earlier. So, we may be able to start delivering in first half of 2017. That's a very encouraging sign. So, an airplane that's performing on track and opportunity to deliver early, that's a very good sign. And we're encouraged by that.

Secondly, the demand for the airplane continues to be strong. And when I said narrow-body marketplace is highly competitive, and there's a lot of discussions about this middle-market airplane and do we need a larger version of the 737 or not, I can tell you that the way we've read the marketplace and the heart of the market being where the MAX 8 is located is very clear to us. And that's continuing to [ph] show up (34:48) in competitions.

I think just over the last couple of weeks here, the big win we had with VietJet and 100 MAX 200s is another testament to the value that that airplane is bringing to the marketplace. So, we like the product family as it's designed today.

Now, that said, we are continuing to look at options for our customers. We've loaded the MAX 8 into the production system. The MAX 9 is getting into production system. The MAX 7, the smaller of the family, is not in the production system yet, so we are working with our customers to fine-tune that offering. There's been some discussion about whether we need a larger version of the MAX beyond the MAX 9 at that middle of the market area. We're having ongoing discussions with customers. That's not something that is going to make a big change to our plans in the near term. If we need to go there, we're capable of going there.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

Q

This is more of a stretch of the MAX 9, it's not an all new...

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

A

A potential stretch and something that we would handle within the R&D profile that we've talked about. If we needed to go to an all-new middle of the market airplane – and I still think that's an if – if we needed to go there, that new airplane would probably be a 2024, 2025 entry-into-service airplane. The R&D expense for that would be on the back side of 777X. So, from a sequencing timing standpoint, actually, would fit very well with our R&D plans.

We don't see modifications to the MAX family or middle of the market airplane as something that will fundamentally change our R&D profile over the next five years. And so, that game plan that we've shared with you on that consistent R&D level at roughly where we are this year, we think that allows us to do everything we need to do in the marketplace.

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

And when you put this all together thinking of potential investment for an airplane in the next decade, the 777X, how it plays out, what does your trajectory look like now for R&D and for CapEx given those profiles?

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

Yeah. What you're going to see is CapEx we're actually at a peak level this year. So, it will actually come down a bit next year and stabilize. The principal drivers this year around 777X capital and getting the new composite wing factory stood up. R&D is going to be incrementally higher next year than this year principally driven by 777X but, again, in the same ballpark that we're in this year in terms of total spend and percent of revenue. And you should see that total spend being at roughly that level over the next several years as part of this ramp-up. The good thing is with consistent R&D performance with the MAX now wrapping up neatly, the dash-10 is looking very good as we finished up its development work. We're into the heart of 777X right now, execute that per our plan. And then on the back side of that, if we needed to, we could address middle of the market.

That sequencing is a much better way for us to do R&D overall. And that way we can move teams, development teams from program to program, so we gain learning and advance learning as we go. It provides more R&D – more stable R&D profile, financially speaking. And it's just a better way to run a business. And when I look at the market needs and our desire to continue to innovate and stay in the leading edge of innovation, which we think we must to be successful in our second century, and our financial commitments, those three dimensions all fit very well within the R&D plan that we've laid out.

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

Now, one of the things that you've stressed quite a bit has been the push for more service revenue.

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

Yeah.

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

And I'd like to focus on the commercial side. Because if we go back 15 years-plus, I've seen many incarnations of this idea. We're going to expand service revenue – I'm talking organic with growth in service revenue. It's been quite difficult in the past to try and, say, pass through a spare part to a customer through Boeing and sort of take the tax off the top, things like that have never worked very well. So, when you look at the push for more service revenue now, what's different? What gives you confidence you can actually take that up and is this something that we can see contributing to margin improvement in BCA?

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

Yeah. And I should have mentioned that earlier as well when we talked about growing margins over time. We do expect services growth to be accretive to margins as well. But the thing that's different here is our sheer focus on growing services as a priority, not as something that's an add-on to airplane sales, but as a priority unto itself.

If you take a look at the market today, the services market between commercial and defense is as big as the airplane production market. You could argue that we're about 50% of the installed base in commercial airplanes. We're only about 6% to 7% – 6% or 7% of the market share in services. So, not only is it a big market, we have space to grow.

We need to better leverage our OEM knowledge. So, our proprietary parts business, the right kind of pricing in that business and getting dedicated effort on our traditional parts business is a big portion of our growth. And we just haven't emphasized that in the past as much as we will now. Mods and upgrades and using our OEM knowledge to do that in a cost-effective way is another big growth area for us.

And then one that's now enabled by the new technology airplanes are information-based services. These tend to be higher margin services because they're low-capital investment, and they leverage the technology that's in this new generation of airplanes. A good example there is our GoldCare offering. We have recently restructured that offering to provide much more flexibility for customers, more of a portfolio approach that Stan Deal and his team have put together. And we now have more than 2,000 airplanes worldwide that are taking advantage of that GoldCare portfolio.

We have now more than 3,000 airplanes worldwide that are taking advantage of our advanced health monitoring and prognostics capability. And I think we're just scratching the surface of those information-based services. So, those three areas are all growth opportunities for us. We are focusing leadership and resources on growing services in ways that we haven't done before and we still need to perform. But the prioritization of growing services is very clear and we're putting our resources behind it.

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

Do you have any kind of a target for what that service business should represent as a percentage of BCA revenues or a growth rate, or how should we think about the size of that contribution going forward?

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

It should clearly outpace the overall growth rate of Boeing. So, based on the production ramp-ups that we already have in place, top line growth, overall, going from this year to five years out, you can get a pretty clear idea what that top line growth's going to look like. I would expect growth in services to be higher than average. So, this is a 5% to 10% kind of growth opportunity that's in that category.

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

Okay. I'd like to switch over to defense for a minute. I've got a few questions on that. Margins in Boeing Military Aircraft, Network and Space Systems, those have lagged some businesses at your – similar businesses at your competitors. What should we see in terms of margins over time? Should we expect to see some margin expansion there in the next five years?

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

You should. And top line is more challenging in the defense business, although we still see some incremental opportunities there, but bottom line growth is important to us. And we started on a path there with what we called market-based affordability over the last few years, and have taken out almost $6 billion of cost structure out of our defense business. And that's been accretive to margins. And you've seen that incrementally growing margins in our defense business. We're now operating in low double-digit margins. We're continuing to press forward on that incremental improvements year-over-year-over-year, again, driven by the same productivity machine and this market-based affordability effort.

And we still see opportunities to do that both inside of Boeing and with our supply chain. It's the same formula that we're using in commercial airplanes. And, in fact, in many cases where we can share infrastructure, share overhead, share R&D spend, we have some synergy opportunities that most other companies don't have.

And so, having our defense team and our commercial team work together on cost reductions and margin improvement is part of how we get there. But my sense now is we have the fundamentals in place. We're seeing year-over-year margin improvement in our defense business, and that is a trajectory that we're going to stay on.

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

And when you look at the top line in defense, can you see that growing over the next five years at, say, low single and mid single digits [indiscernible] (44:14)?

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

Yeah. I think it'll be flat to slow growth, but there are some opportunities there. On the headwind side, we just wrapped up C-17 production, so that production line's gone away. But that will be more than replaced with the continuing ramp-up in P-8 and tanker. And, again, I'll emphasize, going back to tanker, we still have the whole production program ahead of us. And this is a big ramp-up opportunity for us. That'll be helpful both in commercial airplanes and defense.

Helicopters, rotorcraft remain very strong. V-22, Apache, Chinook, global demand for those multiyear contracts. Those look like strong, incremental growth opportunities. Satellites, including both commercial and military. Services growth, in particular international services growth. And if you look at our defense portfolio overall, about 35%, 40% of it now is outside of the U.S. And so, we are winning internationally because of our ability to bring global support there. So, we see defense services as a growth play.

Those are some of the areas that will not only sustain our top line in a tough budget environment but allows to incrementally grow the top line. And as you know, the defense business is also a very reliable earnings and cash generator and we're going to continue to emphasize that.

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

And on some of these international growth opportunities, if you look at the Middle East, are you seeing any impact from lower oil prices, more budget pressure there and the things that you're looking to sell into that market?

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

We're not seeing direct impact to our sales. It's something we're monitoring from a geopolitical standpoint. I think some of the countries there that are obviously highly dependent on oil revenues are seeing some overall budget pressure and they're having to make some priority decisions around how they spend less incoming revenue, if you will, from oil.

That said, we see the buying of defense products still can be very strong in the region. And our principal customers there in Saudi Arabia, UAE, Qatar, Kuwait all are continuing to purchase our aircraft. So, we see that market as one that's being sustained despite what's happening in the oil arena. Some of it driven by the complex geopolitical situation and threat situation in the Middle East.

We do continue to see, for example, fighter opportunities in the Middle East in both Qatar and Kuwait. It's been quite public about the F-18 and F-15 deals that are continuing to move forward and we're eager to get those finalized and approved and are hopeful that'll happen through the administration here over the near term.

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

And one specific area within defense, ULA. I mean, the launch market has become much more complex. Can you comment on that? [indiscernible] (47:15)

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

Certainly, it's become more complex, and we understand the need for low cost reliable space access. I will still say that ULA brings, by far, the best, I'll say, mission reliability, mission assurance to that [ph] game (47:29), right. And that high assurance ability to put payloads into space is part of the business model. Now, that said, we also need to reduce the cost structure at ULA and ongoing competitions with companies like SpaceX point that out. This is another case where competition is making us better.

And so as part of the ULA venture, we are investing in that next-generation, low-cost rocket, the Vulcan rocket. There's some ongoing work with engines there. Russian-made engines have been in the news a lot lately. So, we're working with congress to try to build a bridge to that next-generation, American-made rocket. And we still see that as important. Low-cost, reliable space access is an enduring need.

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

Well, we have to wrap up here. But perhaps to finish up, could you tell us, as you look forward, what are your sort of two top priorities and your two biggest challenges you see?

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

Yeah. Well, so, first of all, the opportunity for sustained growth is very clear to us. And I mentioned earlier that the market strength, the backlog strength, the committed production rate ramp-ups, delivering on that backlog, profitably ramping up commercial airplane production and getting these new development programs delivered is absolutely key to us. So, a very, very clear focus there.

Secondly, positioning our defense business for the future. While it's a more difficult market environment, it's one that we're very serious about sustaining and having complementary large-scale defense business, because that is unique – a unique competitive advantage to Boeing to have both that commercial and defense capability, and underpinning that with the productivity effort that's under way, so we can fuel future innovation and return value to shareholders. I look at those as the big three things we need to do, [ph] powerful brand, powerful (49:20) commercial airplanes, position the defense business, and drive the productivity engine for future innovation and returning value to shareholders.

On the risks side, we continue to keep a close eye on economic risks around the world, whether be it oil-based, currency-based, geopolitical matters. No one of those is a particular worry, but it's just that composite of risk areas that we're paying attention to. And then on internal execution, successfully building the 777 bridge, finishing up 747 sales to fill out that longer-term bridge, and again, delivering on our development programs. Those are the areas that we're trying to derisk for the future.

Doug Stuart Harned
Sanford C. Bernstein & Co. LLC

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

Dennis A. Muilenburg
Chairman, President & Chief Executive Officer

You're welcome. Thank you, Doug. Thank you all.