03-Jun-2022

The Boeing Co. (BA)

Bernstein Strategic Decisions Conference
CORPORATE PARTICIPANTS

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

OTHER PARTICIPANTS

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

MANAGEMENT DISCUSSION SECTION

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC
Okay. Good morning. I'm Doug Harned, Bernstein's Aerospace and Defense Analyst. Today, I'm really happy to have with us Dave Calhoun, this time in person, CEO and Chairman of Boeing.

QUESTION AND ANSWER SECTION

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC
I think to start out with, Dave, maybe you can take us back through – you've been a little over two years in the CEO position. Maybe you can take us through some of the challenges you've seen and where you stand now.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.
Yeah. Happy to do it. I don't get a chance to tell the story much, but I -it is worth going back two years in for situational awareness, know what we – what I and the new leadership team started with, it was January 2020. Everybody knows we had not yet recertified the MAX, and we had missed a couple of our own deadlines to do it. And maybe way more importantly, the FAA took public exception to our laying out schedules and so forth with respect to that recertification. And it was, I think, a public demonstration of their frustration with the company and its – the way it was handling that recert process.

Maybe more importantly, at that point in the grounding, we had 385 airplanes on the tarmacs with our customers, and they were going to sit until this all got behind us. We had 450 of those airplanes on Boeing tarmacs because we had kept our production rates live and pretty much full out for the whole calendar year 2019, and preparing for recert. So, these were loads – I mentioned that because it then took us almost a full year when we first set up our expectations internally, forget externally because we never called that out, but internally, we're probably three months later than we have hoped to be.
Now, COVID came along in that process, so I can't really fault anybody on the team. But we got there. And most importantly, the FAA Administrator, Steve Dickson, at the time was a pilot. And he's a 737 pilot. Steve wanted to make a real statement with respect to the airplane and say, I'm not going to certify that our team has until I fly it. So it had a little bit of press to it. It was the very end of the year they did it. And then sort of the real hard work starts. The real hard work starts. Because what do you have to do? Well, just a MAX saga, and I'll a layer a couple of things.

But the real hard work is let's get our 380 planes at our customer premise up and flying. As you know, in the cert process, and we've learned, every day we learn, it's not just about the safety issue that caused it. It is coming current on every deferred action, every problem report, everything that's been learned about the airplane and it's early years and make modifications to make certain that everything is up to date and compliant with the engineering spec. And that is a lot of work. And the best way to describe it is to do the mods on an airplane that we had already had and finished goods are on our customer premise. Took as many hours as the assembly of a new airplane. So it's a big deal, and we have to assemble it in different locations, different places. So we started on that work and we pledged a couple of things that, to this day, drive most of my thinking.

Transparency, number one. Like nothing gets to hide, nothing. And the only way to restore public trust is get the airplanes out. But don't ever, ever hide anything, any step of the way. And transparency is a hard one because it's a double-edged sword. You're going to do it to get the trust, but you're also going to create havoc along the way. And we've seen that and felt that. We are absolutely not moving off that one. And then, public trust is our goal. That's it. Because you'll recall on that day when I started in the role, that was the big question, who's going to get on one? That was the question.

So, the good news is shortly after the sort of goal started it in the Revenue Service, and from the first day, those airplanes were packed, from the first day. And as long as we delivered every next airplane with the right reliability and all the quality dimensions attached, we'd be okay. And we still believe that we're still in that philosophy.

So, spool it forward, where are we with the MAX, which is still the most labor and human resource consuming recovery that we have. Out of the first 450, we have 240 of those airplanes still to be delivered. But we're a long way down that track. And very importantly, the work that we do on the mods is now sort of standardized, and we're beginning to get a little more predictable on that front, and that's a big deal.

And then the other part of this one is, and of the Boeing 378, we have roughly 120 that are not yet up. And those are the ones that were at our customer premise. And most of those are in China, mostly because they gave us the – they didn't issue their directive until almost a year after the FAA. So, anyway all that process is going well, but we think about it as sort of one at a time and highly transparent. And if it's okay, on March, right after January, which was the situation, COVID springs.

And a reminder for those who don't remember the point, COVID started in a nursing home in Washington state between the two biggest Boeing plants. That's where it started. The first shutdowns, the first freezes were right then and there. And needless to say, we spooled up all the safety hotlines. We did all the things you do to protect your people. That became now our priority. How do we do that? How do we make sure that we continue assembling and building airplanes, but at the same time ensuring safety, and play COVID all the way forward?

Many of that year we issued a forecast. Most people said, don't do that. But 2023 and 2024 is what we anticipated would be the recovery back to the 2019 levels, the pre-peak levels. Truthfully, on the demand side, it's gone much faster than that. But on the supply side, it's gone much slower than that. And so we're in that what I call as a supply constrained world for quite some time. And the impact of COVID is, needless to say, what it is.
When we started, 80% of the world’s traffic stopped. We’re now at the point where most is recovering even international. And China, of course, is the one that's gripped in the down. And as you know, 10% of their flights are in the air. So we’re at that moment where we just have to be patient and navigate our way through it. So those are the big overlapping ones and there are plenty more as you know.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

Yeah. So there's a lot of things to talk about here. But I just want to get at one thing right away, which is come up with us. And it is the question of do you need to do an equity raise? Because it's something we haven't seen why you will need to do one, but it continues. We continue to ask this question.

**David L. Calhoun**
*President, Chief Executive Officer & Director, The Boeing Co.*

And I don’t understand it because I get it as many times as you get. The answer is no. There is no plan for an equity raise. And I've said to everybody, you'll recall when the window did open at the Fed and we could lean into our credit, we went big. We raised $25 billion. That has proven to be a pretty good number. Pretty good number. And it's given us plenty of cushion. And every month that goes by, we test liquidity every way we can think of like the worst-case scenarios, like forget what I just described, much worse than that. So I'm confident on the liquidity front. Cash flow is getting better every quarter. Brian described this as sort of a turning point year and it is, and I also believe that. I can't measure it week by week or month by month or even quarter by quarter, but I know the year is going to be substantially better. Remember, I started with burning $20 billion in 2020. And so, it's progressively getting better. So, we're at that stage now where we can start to quietly pay down debt.

And I think if you ever did raise equity, you would want to know 87s are being delivered, right? You would want to know you have stability on your MAX line. You would want to know with certainty what's going to happen in China. And all those things are right in front of us. I get it. There are risks, but we're making progress on all of them and those things, when they get a rearview mirror, then we will stop and ask ourselves and evaluate whether `equity is required.

But it won't be a liquidity, it'll be what's the smart thing? How far do we want to advance? And it won't be because I needed to build an airplane. It won't be that either. We've sustained our research programs, our development programs and in, anyway, so that – it's a long winded answer to the answer, which is really no.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

No. I figure. It's like, okay. Got that. You were commenting on how the recovery is coming back better than you thought. One of the things which you've seen is more challenging for you than for Airbus, is that because you've had these delays, it’s allowed airlines to make decisions to defer or cancel, and make changes and in schedule, whereas Airbus, is still – they're in – people under contract, they can, don't know, push them out. So, right now, when you look at – you had – you had a pretty good MAX delivery month back in March. But, are you seeing the demand coming back to a level that if you were not constrained by supply, you're deliveries might be substantially higher than they are today?

**David L. Calhoun**
*President, Chief Executive Officer & Director, The Boeing Co.*

Well, that's a giant if.
Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

But if you ask that question, yes, we would be bringing up rates at a fairly rapid pace. Yeah. Long as we can stay stable and deliver and then we're not supply-constrained but there are.

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

But I'm talking delivery rates – first, delivery rates rather than production rates.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

You're saying that delivery opportunities would be...

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Big.

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Big, big and bigger. Right now, it's a relatively hot market.

Douglas S. Harned
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

It is. And that's why I say this thing came back faster than we imagined it wouldn't. All because of vaccines, but yeah, right now it's a relatively hot market. We are trying to protect positions for all of our customers, and specifically China because we want to continue that trade. So, yeah, there's a lot of ways to talk about it and say it, but right now, demand is significantly better than supply.
Because there’ve been a lot of people that have suggested that Airbus will have a more dominant narrowbody position than what we’ve seen. We’ve seen appraised values, things like that. Showing the MAX looks actually quite good right now.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Harned  
Analyst, Sanford C. Bernstein & Co. LLC

But we heard Ed Bastian earlier this week talk about how they're in negotiations with you on the MAX. I mean, how should we think about the potential for a ramp? And again you may have some supply constraints.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Harned  
Analyst, Sanford C. Bernstein & Co. LLC

But can we see this headed back? What timeframe back to the levels you used to do so?

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

So, I'll try to answer the question, but I won't discuss time frames because that's where everybody gets in trouble. Right now on deliveries, because of supply constraints, if we can stabilize and continue to move our finished goods airplanes, still over 200 of them in our possession. If I can stabilize and continue to deliver those alongside a stable 31 rate, advantage Boeing on deliveries for the next, I don't know, 18 months to 2 years. I view that as relatively significant. And to step back with respect to appraised values and so forth.

The one thing I was confident on day one, and I'm even more confident today, is the ability of our airplanes to compete. Our airline customers, they measured this to the penny. They know the trip cost to the penny, and they know the seat cost to the penny. And they measured both guys each time they go out for a procurement and included. And then they make decisions on that basis. And the MAX performs incredibly well on both fronts. There are niches where we have advantage and niches where the other guy has advantages. But on the competitive front, and I personally sat across from customers in this process, I don't worry about product performance. And the MAX is actually outperforming its spec by a fair margin, especially on fuel.

So, anyway, yeah, delivery. I think delivery is the competitive advantage if you have it for the next couple of years.

Douglas S. Harned  
Analyst, Sanford C. Bernstein & Co. LLC

And you said 31 a month, next 18 months that would be a success. I mean, what do you look at...
David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Well, I hope it's better than that. But I'm not pulling a timeframe.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

No. I understand that. But what do you look at to decide when do I do the next rate brake?

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Stability, it's you guys watch every monthly delivery. So, so do I. We have to get stability with respect to month to month to month to month. What does that mean? What does that imply? That means we have adequate in process stocks to support each and every delivery, all the standard work in station, blah, blah, blah, it's a lot of lean practices, et cetera. But until we get to that, you make a rate break and add another six and four in the supply chain, et cetera.

And in the supply chain, they know where we intend to go. So we're as transparent as we can. And we also tell them when we're likely to make those breaks and that it's tied to the stability. And stability, they play a role in. So they can help us get this stable, they can help us, and we can help ourselves get this stable. And then we'll immediately entertain breaks. And we're already discussing, of course, the investments required to add a line here or add that. That will be planned for and easy to pull the trigger.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Okay.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Now, on China, so, it's been a while since the CAC came back and gave their sort of safety approval. Now, traffic has just been crushed there, you've got China Eastern and the whole Airlines kind of in lockdown in Shanghai.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

So, where are you with respect to seeing those, I know, it's very hard to predict what's going to happen in China. But – but what are the dynamics here in terms of seeing the MAX airplanes start flying in China, the ability to deliver again, what has to take place?
David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

So, I remain confident and constructive, and why is that? Because we are in contact with our customers in China all the time, it's constant. And we are in contact with CAC. I mean CAC has never disappointed us on. We always knew they were going to take longer to issue their directive that we can fly again. But they did it almost on schedule. They said we could do it. And at the same time they were certifying their own airplane.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Right.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

So, it's been constructive with our regulator. And, yes, the central government has to approve sort of the delivery process meaning I know they're on order. I know you've paid put money into them. You can't take them until 777X. And there's no doubt that the current shutdown is impacting that because, what would you do with it if you got it? But we've started up our Zhoushan facility, the finishing center and we've gotten support from our customers in every front. So I just believe this is one of those where we keep our heads up. We stay tuned and wait for the moment where they need airplanes. And unfortunately there's a pause on that.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah. And sometimes it comes up that there may be political issues here but it's just sort of strange for me. I mean I think back to your prior life, I mean, their own airplane has a GE engine on it and CFM engine on it. I mean the idea that you would actually break down among political lines would do a lot of damage not just to Boeing in the US but also to their own programs. And I'm just curious how the politics in China tie into the other issues? Is that minor or is it still part of this?

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

So it's I'd like to tell you I've got perfect insight, I don't. Is it a diplomatic battle, no. Everybody is saying the right things, doing the right things. I know we have support out of our administration despite a bigger rhetoric that's out there. Does that impact things, maybe, maybe not. All we can do is just stand by our customers, stand by all of the investments that we've made derisk our delivery line. So, as you know, when we started the year we probably had 100 airplanes in sort of at risk in the year. We're down in the 20s. We could be as low as we want to be. And we don't want to be low because we want to protect our customers when they come out of these lockdowns.

So that's the state of affairs. I do not have any particular insight on geopolitics. I don't think it carries as much weight as the world would like to think. I think we've been victims of some serious timing issues.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Well, one thing on the MAX is you've got some customers that really want their MAX 10s. Actually, MAX 7s too. But can you give us a sense of where that certification path stands and how you're thinking about it.
David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yeah. So I think the big question is the EICAS requirement at the end of the year. So, we might as well get straight to that. I am totally -- we, as a company, are totally committed to the Dash 7 and Dash 10. And our belief is that when that requirement was put in place, the legislation was formed, it was -- the reason there was a delay was for that to cover these derivatives. And no one foresaw the certification process extending, extending, extending for good reasons on both sides, Boeing and our counterparty. But we are totally committed to it because it’s a great airplane and it’s a safe plane. And it will be discussed on its merits every step of the way. It will be discussed on its merits by our regulator, with our regulator, and ultimately...

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

You mean the EICAS?

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

EICAS. Yeah. That constraint.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Okay.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

But otherwise, yeah, we are fully committed to these airplanes. And we intend to deliver them to our customers. And I think we have certainly the Dash 7s on the timeline I think is way doable and will not content with that.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yes.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

With the MAX 10, if you end up in a situation where you have to go where they say – because right now it’s really mixed. I mean, we’re seeing Senate and House come up with different commentary around this.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yeah, but let’s not get to politics.
Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

**Q**

Yeah.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

**A**

It's work our way through the merits of the airplane with our regulator. That's the most important part of this one.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

**Q**

Yeah.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

**A**

It's the same airplane that we sell, you know, in other derivatives today. And our pilots will have a voice on safety, et cetera. So in some ways, because we accommodated a third angle of attack approach in some ways in response to the European's request.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

**Q**

Yeah.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

**A**

It's again, up – you always have to be careful where you say things, but this is one of the safest families of airplanes ever, and this one just might be the safest. So that's how I think about it.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

**Q**

Well, if we switch over to 787. At last earnings report, you said that documentation was completed into the FAA.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

**A**

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

**Q**

There have been some headlines out there suggesting things could be incomplete. I know there's always back and forth between the OEM and the FAA. Can you update us on at least how you're thinking about progress on the 787?

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

**A**

Yeah, I've read those reports, too. And like everyone, I run it with a microscope and ask everybody. It has been a transparent relationship with the FAA on this one since the Board go. So this isn't a save it up and then boom,
let's -- we'll hit them with it and we'll win. That's not what this is. This is a back and forth that they've been involved in the process. They were involved in the setup. When you apply, think about it this way, et cetera, et cetera. We put it in. We're proud of it. There's always work to do post-application, it's just -- it is what it is. We had a very clear response letter from them, clear in a very constructive sense and tone. Let's get this done sort of attitude.

And that's the way it's been ever since, so that is the way it's progressing, and any way our confidence kit goes up. Submitting the app, knowing that thought we understood what they wanted, etcetera, et cetera, confirmation that, yeah, we were -- we're moving down that path. I should be feeling better and I do than the day we submitted it, and definitely better than the period before we submitted it.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

And did it make much difference with the leadership changes at the FAA?

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

No. No. Actually, that's been pretty seamless.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Honestly, it's been very seamless. And that team is stepping up, and most of this work is done at the local offices. So, our real relationship has to be built there.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

And it's like everything. I'll defend our team when I need to and they'll defend theirs. But we're not battling. It's not what this is.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

I think there's some pretty good recognition now over the last two years that we're going to be transparent, straight, every step of the way. We can't do anything without them. They want to see American industry succeed. It's not -- this is pretty constructive.
Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Well, any of customers that want these now.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Customers are dying for them.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah. Yeah. They are.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

They are.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

One thing that I see come up sometimes, and I used to always hear this, every conference Airbus would stand up and Boeing would stand up and argue about market share. Who has the greater market share, and people tend to even count it differently to make themselves look better, it seems like. But right now, when you look on the narrowbody side, you're just fundamentally at a different production rate than Airbus is today and probably will be for a little while.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

How do you think about...

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Not delivery rate but production rate.
Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah, true. True.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

So that's important.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

But how do you think about market share vis-a-vis Airbus? Does it – is that something that really matters to you?

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

At this moment in time, it's less important. And why do I say that? Because think of where we came from, that idea of the number of airplanes back in the air, all those things. We have to stay focused on doing that incredibly well. One, one airplane at a time. If I jump to a market share discussion immediately and say, Let's get above 50 and let's do it next year, what happens? The whole system gets crammed down in every way.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Supply chains get tested in ways that they can't perform. Stability goes down. It's not a winning hand today, and in a supply constrained world, it is definitely not a winning hand, in my opinion.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

So I am not going to run a public campaign on production rates and share targets. What I do know is our product portfolio across the board competes incredibly well. So, while we talk about the narrowbody segment most frequently, because that's where a lot of the cash flow is. In the widebody world, with that product line up, soon as I get stability in 787 delivery and reinstated. I believe I have a strong advantage. Strong advantage. So, on balance, and you go back far enough, you remember that.
It's going to get right back to that. I have to be patient. Our company has to be patient. We have got to work our way through these supply constraints. We have to be honest with everybody about it while we do. And yes, plan for rate increases, but only pull the trigger when the supply chain is ready.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

And 777X.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Yeah.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

So it's been pushed back multiple times at this stage. Can you update us on where that stands. And also have you seen fallout from customers that looking at that airplane and perhaps it's just become too late for them? You've heard some rhetoric out there, right?

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Right. So, again, well, let's talk product families and let's all remember and know that they are 50-year lives. My view of the 777 family, and specifically the 777X, and there are passenger and freighter versions of these airplanes. It will find its way into a market where it is on its own. That widebody world used to be a three-way race between the 747, which we kept alive. Maybe too long, but we did. The 380, which does not exist. And the 777. And now the 777 will be on its own. And it was the most efficient of all of them anyway. And in its league it offers advantages. You have to be able to fill it. But there's a big enough market. It's not a niche to be able to fill it, both with respect to passengers and freight.

The market response disappointment they couldn't get it sooner, disappointment. Re-engineered the deals to accommodate the new timeline went fairly quickly, not complete with everything but pretty good. Interest in the freighter version very high, very high. You saw Qatar launched it. Lufthansa jumped on it. There's a lot of good things going on with that freighter version. But we're playing the long game. I don't want to get caught in another cert race where everyone is trying outguess us as to about when is it going to be and what is it.

So, like the first time we took the MAX cert out nine months to a year from where it was previously scheduled, we put time in there for FAA discovery, for regulator discovery around the world, and that's what we've done in this case, given ourselves the right time and try to incorporate all these lessons that we've learned through these things. And I have to tell you, I've learned as many as anybody. I would have predicted things moving along a little faster when the first time you and I sat down together after I took the job, right?

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.
Things have changed, that process, it is harder, it's tough. And it's all at – in the end, it's good.

Certainly, yeah, sort of post-2027 freighter market, when you have to deal with the environmental constraints, this should set up really well, I...

Set up incredibly well, you're right.

Now, one thing that has come up a lot has been, do you need to – are you about to launch a new airplane? You know, I've been around this myself a lot, and I certainly have not seen any of the ingredients in place that would catalyze that, but it gets asked a lot.

Yeah.

So, maybe you can tell us where you are on that thinking?

Yeah. And I know you know where I come from and I'll try to be as clear as I can be. If you go back in history on new airplanes, they were never really started until the propulsion package brought somewhere around the 10%, 15%, and 20% improvement over the last one. That's not happening today. Now, there are a lot of good ideas that are being tossed around on the subject of sustainability and new ways to power airplanes. That time line is well out there, well out there, at least a decade from now, my view.

And the incremental performance is narrow enough that you're not going to bet an airplane on that. So, what do you bet on? The other, in my view a great advantage that can be add on airplane development is the use of a contemporary toolset to develop a true digital thread, right, nose to tail, that virtually builds it, virtually services it where the service arm of your company can draw on the original drawings through that digital thread to perform its service and create its standard procedures.

With a manufacturing facility, you can test the throughput virtually. Why am I bullish on all that? Because we've done it in a couple of our defense programs and it's offering enormous advantage to us to be able to do it that way. It takes cycle time out of the assembly line. That's not the big one. The big one is it takes a lot of learning, the number of tests you can run virtually on the design and performance of the airplane, the manufacturability and service. It just takes enormous timelines out of that. But we have to develop inventory of the tools. So we have...
them, we’ve practiced them in several of our defense programs, some of which you see, some of which you don’t. And we’re very bullish on it. I had a review yesterday with an integrated team to discuss the status of those tools and what is the maturity concept.

So, to get back to the original question, at least a couple of years before I’m confident that those tools are tested and mature enough to implement on the next airplane. When that happens, then we design the next airplane. We don’t do it the other way around.

So I’ve always – I’ve felt strongly this way. You and anyone who’s followed our industry long enough knows how hard it is to bring a new airplane forward and how many people we disappoint in the process, et cetera.

Today’s tools are – contemporary tools that we have today can eliminate a lot of that risk. And I want to – and I don’t want to run forward until I get that. And by the way, we’ll go back to the first set of questions around my confidence in our product line and its ability to compete. I’m confident. My sales team is confident. Our customers expressed confidence to me. So, why would I? Why would I rush? No good reason.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

Yeah. And when you think – but when you think about this, the approach you’re talking about, I can imagine having an impact on so nonrecurring and development. It could have an impact on manufacturing cost, maybe systems. But if you put aside that traditional 15% engine advantage type of a goal...

**David L. Calhoun**
*President, Chief Executive Officer & Director, The Boeing Co.*

Yes.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

...you take that off the table, I mean, what are the things that one would see...

**David L. Calhoun**
*President, Chief Executive Officer & Director, The Boeing Co.*

Yes.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

...that would get you excited about that new airplane...

**David L. Calhoun**
*President, Chief Executive Officer & Director, The Boeing Co.*

Yes.

**Douglas S. Hamed**
*Analyst, Sanford C. Bernstein & Co. LLC*

...without the engine advantage?
David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

And it's a fair question. And we will have to prove that test. But there are things you can compete on. Sustainability will be one. Readiness for sustainable fuels, et cetera, et cetera. And the efficiency of the airplane itself. Cockpit design and major step toward autonomy, major step.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Okay. Now, we flip over to defense. You took a number of charges in Q1.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yes, I did.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

So, can you help us understand how you're viewing these programs where the company obviously invested upfront...

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yes.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

...and now you're paying for that in a sense?

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

Yes. So the three programs that took the big hits, fixed price development. So we've learned a lot of lessons on that one. But I do want to sort of go backwards. We took a loss on two of them, upfront, the day we signed the contract.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

The Trainer and MQ-25.

David L. Calhoun
President, Chief Executive Officer & Director, The Boeing Co.

The Trainer and MQ-25.

Douglas S. Hamed
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.
MQ-25 is basically an autonomous refueling plane carrier-based landings, et cetera. The Trainer is designed, frankly, to be available and useful for all the services. We made those bets on big markets and follow-on opportunities. And if somebody said to me the first day that the charge would have been X plus what we just had to deal with, I would have been happy to say, let's go. I would have been happy to say, let's go. Those follow on markets and anyone – they can look for themselves what [indiscernible] (34:00) and scale are. They're big enough and they exercise enough of our technical development to be great returns for shareholders, great returns for shareholders, especially when you compare them to commercial development programs. It's – they – you earn them sooner rather than later.

The third one, the presidential airplane, it just is what it is. There are no follow-on opportunities, and we've learned a lot of lessons, and COVID really hurt. I say it, this is – I'm not picking on anything. We accepted the deal, so we – and we're going to deliver great airplanes. But COVID and clearances in combination are lethal to productivity. They just are. When a crew goes off and you can't replace it, you are – you got a vacuum. So – and yes, all of the custom configurations, all those things, they begin to add up. And they did – and anyway – so we got ourselves in trouble.

I want to just mention this one in the context of another one, which we haven't discussed, the tanker. Fixed price development. I saw one of the Air Force leaders say today, well, maybe we shouldn't have done that. Well, we did. I'm not speaking for them. We did. We took it on. It was as big an issue on my first day as the MAX. It just was. We had taken almost $6 billion in charges over time. It was hard, much harder to build and develop than we imagined. We were disappointing our customer. And I met with that Pentagon team and they had faith in the design, but they were discouraged by where things were. Yeah. I just said to them, this is going to end well. We're not giving up on the airplane. I don't care how many charges we take. It wasn't just me, it's our whole defense team.

So, why is that important? Because the defense department, we're never going to get contracting perfect. We're going to learn a lot. They're going to learn a lot. And we'll get better. And hopefully I won't take the – take those kinds of risks, our team won't. We'll get smarter about that. But the one thing they have to be able to count on is we complete our designs, we develop them to perfection, and we introduce them to the war fighter in the best way we can.

So, today, I read 97% of the receiving airplanes are now ready and operable with the tanker. That is a big accomplishment. And I've listened to the war fighters and I've listened to the folks on the plane talk about how good it is relative to what it's replacing and ultimately it's satisfaction. They've stepped a little bit back from the notion that we're going to create another competition. So I never take anything for granted, but I want the defense department, our armed forces, the war fighters to know, I don't care what the charges are, we signed up to do a product, we're going to do the product, we're going to do it really, really well. And I think that's noticed. So – and I – that applies to the Air Force One as well. These are going to be great airplanes that are going to serve the country.

One thing that's so difficult in defense, because, as we look at BDS and even the defense part of BGS, it's hard to – not much transparency in there, when you and I were talking about this earlier.
David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yes.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

And so you've got a lot of things that are going on. Clearly, a charge on the tanker is negative. It gets headline.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Pretty much.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

But then there is this...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

...big sort of tranche of business in there that's hard to see...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

...but still generating large amounts of cash flow.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

And can you give us a sense of how we should think about the defense business and how like it's sort of like we're looking at an iceberg and we only see the little top up there...
Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

...with these issues on it. How does the rest of it perform?

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

And that's fair, right? We owe everyone a much clearer picture of that, including our services franchise. Because when you do lay on the services on top of what is now just the development of new programs and planes, it's a very competitive business and it does generate cash. No question about it. It reinforced its importance to the company in the first year of COVID, in the second year of COVID, because it did generate cash, and it generated it every quarter. And because the defense department was accommodating with respect to policy because of COVID, et cetera, on cash flow, we were beneficiaries of that. It mattered. It was helpful. And it is a steady business despite what I described last quarter. And we do anticipate we will continue to get steady cash flow out of that, out of the defense business. And, as you know, most of the development work is paid by them, the government. So it doesn't represent the same kind of investment risk that the commercial side does. So we're – we'll take another stab, because I think it's a legitimate question, and it's not easy to find and understand the business in totality. But we love our classified work. I just – we love it. I wish I could talk about it. I can't.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Yeah.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

I think it represents the best of the best in technology development, et cetera. We have some terrific programs, the F-15, and it's now – it's used in the military and acceptance. Most of the surprises are to the upside with respect to the performance and the way it will play in the military. We have that MQ-25, we have the Trainer, we've got all kinds of derivative airplanes out there. We like all of those, and they are cash accretive for us and we hope it stays that way. And I do think this realignment around the world, because of its recent not just threat but invasion, that realignment is going to bolster things, I think, over the next three to five-year timeframe.

Douglas S. Hamed  
Analyst, Sanford C. Bernstein & Co. LLC

Okay. Yeah. One thing we touched about a little bit I wanted to hit on, on culture question. There've been a lot of issues over the last several years. I mean, well before the MAX issues, I would say, when you look at some of the things related to the tanker and so forth. Something that, I mean, that I have seen in my prior life, and we even wrote about when 10 years ago was this issue of transparency in management and that often you will have within the company, people have been there a long time, and sometimes you could have issues occur and people would hope they just get resolved and the issue doesn't get moved up. And my sense is that a number of the things we've seen over the last several years have been a result of that. You couldn't get on top of it quickly enough. How do you think – I mean, how do you see this and how do you address it, if you agree that's an issue?

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

I do agree that over my course of history, like yours, sort of over those same 20 years, I see that. By the way, I see that in many big companies...
Douglas S. Harned  
Analyst, Sanford C. Bernstein & Co. LLC  

Sure. Yeah.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

...it's just to what degree, and I would say we're at the higher end of the degrees, and I agree with that. So, how do you deal with it and how do you gain transparency? We've taken an awful lot of steps in that regard. And not to mention the simple fact that every time I'm with a group and any time I'm with the leadership team, it's a late discussion when trouble is worse than trouble itself. We talk about that regularly. Am I completely ahead of it? Maybe not, but we're getting pretty damn close in my view. Part of what we fixed is the after COVID, we took on a major transformation exercise. There are a lot of silver linings attached to that exercise, a lot of them.

Douglas S. Harned  
Analyst, Sanford C. Bernstein & Co. LLC  

Yeah.

David L. Calhoun  
President, Chief Executive Officer & Director, The Boeing Co.

Some financial with respect to leverage when we get back to our volumes, but a lot of cultural ones. The elimination of layers in many ways. This last headquarters move, interesting. The real moves in the headquarters move is that in the second week of January when I started, I sent every operator back to the business, second week. So the headquarters move was a consolidation of empty space, as opposed to a some let's take everybody over here and move them over there. They'd already moved back to their work. Chief engineer went back to the engineers. Chief manufacturing guy went back to the manufacturing plants. Supply chain back into the businesses. Because now, this group, what – they have to live with their work, they have to sort of enforce things, but it gives me visibility. I'm not sitting in the headquarters building yapping about averages. Averages say nothing about programs.

I don't want to know how these five programs are doing in aggregate. I just want to know each one. So let's go in. Let's dig deeper. So that delayering of the company was a significant part of our transformation exercise, the functionalization of engineering. If we have an engineering problem somewhere, and by the way, almost all of the issues we refer to were started in some kind of – the engineering development cycle as well as it could, it's taking longer, or we got a technical hurdle we got to get over. If that gets hidden early on, and then resources don't run to it, we don't get there as fast as we could. That functionalization, the visibility I have through the engineering arm today is dramatically different. It was designed, yes, in response to safety as a strengthening exercise, but it gives me lots of visibility in many other ways.

So, I think, most importantly for you, I know what you're talking about, I agree with it. Transformation has helped us. It has helped me. My CFO has the same intensity around this subject of knowing everything so we can deal with everything, blah, blah, blah. And we're running as hard as we can at it. We're running as hard as we can at it. And I think we'll come up the other end rather than at the high end of that problem, we'll be at the very low end of that problem.
Well, and in that, I think when everyone here starts to think about where the company is going, what I come back to is, I mean, this issue seems to be fairly essential. If I go back more than a year ago, I think there were some surprises on the 787 non-conformity, is how extensive those turned out to be. But my sense is now that, and it may be, what Brian West was saying about the inflection point, that we haven’t seen sort of any new technical issues in quite some – really since last summer, in quite some time...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

...and the MAX, I mean, you have the cert path, but I – it's not clear to me that there are any of these things sort of hiding in the woods again. So...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

It's – sorry. I'll describe this because it's a great lens on our company and the culture. A lot of introspection all during 2020 on every other program in the company. Because there were questions from everywhere on subjects like this and safety and why these things come up, et cetera. In conformity, not only did we not think it was extensive, we didn't think we had any issue.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

Yeah.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

But the transparency message isn't just a message of let's share everything with the outside, let's share everything inside. And we created a program called Seek, Speak and Listen. It would never be good enough for a leader to not have visited something and therefore not known something about an area that matters. Their job is to go find it, seek, right? And we measure all of our leaders on this seek question. Conformity, 87 is absolutely a result of that culture shift because all those conformity issues...

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

When you identified your mistakes...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

...that was Boeing on Boeing.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

Yeah. Right. Yeah.
And what was it? It was a group in an area, uncomfortable that each and every airplane didn't meet the perfect spec that the engineering drawing called out. Uncomfortable that that wasn't happening. Thoroughly evaluated for safety. In the old days, use as is determinations with FAA participation. That ended. That ended. So, now you put your head down, you accumulate these, you tell everybody it's okay to tell us more. It's okay. And that went on for better part of the year. And yes, since then, it has dried up.

On the other hand, I tell everybody every day, is it over? I hope not. In other words, I want our culture, the very question you're asking, I want them to tell me everything. I want them to tell us everything. And if it speaks to conformity, then okay, pause, get in conformance, move forward. It matters. So transparency's a double-edged sword, it's a great question and a very important lens, and I work on it all the time. I moved down close to Charleston so I could work out of Charleston for a long period. And yes, I got it right here, and I saw it first-hand. And while somebody might pooh-pooh the conformity and its implications on safety and/or the airplane, we need to get that right for everybody, for the confidence of our own people, confidence of the FAA, and most importantly, the confidence of the flying public.

So, now, if we kind of pull back, I mean, we've looked at here as we've thought of the two big things. We talked about a lot of things, but two big things being getting that MAX ramp back up, deliveries and production...

Deliveries coming up, yes.

...and then 787 restart. So, if I think of those two things, I know you can't give any exact timeline, but if I go back to cash, and we don't need to do an equity raise, you've got a lot of cash sitting there on the balance sheet right now, how do you think about the trajectory this year? Because you've got to plan for cash flow. You've got those two big items, the MAX ramp, 787 restart. How do you think about that playing out this year?

Well, this year, we've set early on our intent is to get to cash flow-positive, right? Our first half performance is well on that line. And so we feel pretty good about that. As you suggest, if we have our production lines running, stable and running over the whole course of next year, things get a lot better. We intend – we've announced we're going to have an investor conference in September. Our intent is to try to drive some stakes in the ground on that front forward next calendar year in sort of the what-ifs and what we hope to achieve. And yes, things get a lot better fairly quickly when we get these two lines running and delivering airplanes into a fairly robust market.

And as you look to bring that cash flow up going into next year, how do you parse out the way you use that cash? And I would include in...
David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

...capital investments as well as...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yeah. Well...

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Even today, even over the course of the last two years, again, I had the opportunity to look at all of our investment programs frequently. We're invested. I've had cert programs going for the entire period during these difficult years. If anything, added more resources to every one of them every step of the way. So – and as those then ultimately complete their certification process, it frees up a fair amount of resources to do lots of other things. So I don't think I'm going to have a call on new cash flow that's any different than the call on cash flow I've had for the last two years on the subject of development and research, et cetera.

I look for breakout opportunities. I always do. Wisk was a breakout opportunity for us. Oh, I got a lot of questions about why Wisk. It's $1 billion, right, when you're starving for cash, because we don't hesitate on the things that will matter to us. There's a whole lot of things about Wisk that are meaningful to us, not just a vehicle for helicopter displacement in urban markets and in lots of markets around the world, and/or local delivery service or whatever. It's not just the use case. It's autonomous from the word go. It's autonomous from the word go. We're up in the mid-2,000 flights. Flies every day. We test it under enormous number of circumstances. And we're designing now what we think will be the certifiable version. And our hope is that by 2026 or 2027 it's ready.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

Yeah.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

I just tests us on a lot of fronts. It will also begin to pave the way on what will pass FAA cert in the subject of autonomy. What will pass? What will be the way we move into it? So I know it's a long-winded answer, but I don't think a big draw on positive cash flow next year has to happen for development. I think we're already on that, on that game. And yes, it gets better. We're going to want to continue to whittle down debt and start moving, yeah.
Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

Okay. Great. I think we're out of time here. But Dave, I want to thank you very much for being with us. Really enjoyed the discussion.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Always good. Thank you.

Douglas S. Hamed  
*Analyst, Sanford C. Bernstein & Co. LLC*

Okay.

David L. Calhoun  
*President, Chief Executive Officer & Director, The Boeing Co.*

Yes. See you. Thank you.