Operator

Thank you for standing by. Good day, everyone, and welcome to the Boeing Company's Third Quarter 2020 Earnings Conference Call. Today's call is being recorded. The management discussion and slide presentation, plus the analyst question-and-answer session, are being broadcast live over the Internet. [Operator Instructions].

At this time, for opening remarks and introductions, I am turning the call over to Ms. Maurita Sutedja, Vice President of Investor Relations for the Boeing Company. Ms. Sutedja, please go ahead.

Maurita Sutedja

Thank you, John, and good morning. Welcome to Boeing's Third Quarter 2020 Earnings Call. I'm Maurita Sutedja, and with me today are Dave Calhoun, Boeing's President and Chief Executive Officer; and Greg Smith, Boeing's Executive Vice President of Enterprise Operations and Chief Financial Officer. After management comments, we will conduct a question-and-answer session. [Operator Instructions].

As always, we have provided detailed financial information in our press release issued earlier today. And as a reminder, you can follow today's broadcast and slide presentation through our website at boeing.com.

Before we begin, I need to remind you that any projections, estimates and goals we include in our discussion this morning are likely to involve risks, which are detailed in our news release, in our various SEC filings and in the forward-looking statement disclaimer at the end of this web presentation. In addition, we refer you to our earnings release and presentation for disclosures and reconciliation of certain non-GAAP measures.

Now I will turn the call over to Dave Calhoun.

David Calhoun

Thank you, Maurita, and good morning, everyone. Before I get started today, I want to take a moment to remember those who lost their lives on Lion Air flight 610 and Ethiopian Airlines flight 302. Tomorrow will mark the 2-year anniversary of the Lion Air accident. Not a day goes by that we don't remember, reflect, rededicate ourselves to ensuring accidents like these never happen again. Our deepest sympathies are with the family members and their loved ones today and every day.

It's been about 9 months since the onset of the COVID-19 pandemic. I hope you are all continuing to stay safe and healthy during these very challenging times. Let's turn to our business update on Slide 2. The pandemic is having broad and deep impacts across the globe on health, on the economy, on global trade and, of course, our travel industry. We're focused on the health and safety of our employees and our communities, while close -- while working closely with our customers and suppliers to navigate through this global pandemic to rebuild stronger on the other side. There's no doubt that this moment is among the most difficult in our more than 100-year history. Through it all, I remain confident in Boeing's long-term future.

Let me start today by providing some key updates from across the business. As you know, the COVID-19 impacts on our commercial customers continue to be devastating, and airlines have cut back operations dramatically. We are engaged with our customers every day to understand their short-term, their medium-term and their long-term fleet needs so that we can align our supply and demand.

We're also working together across the industry to enhance the safety and well-being of passengers and crews during the COVID-19 pandemic. Through our Confident Travel initiative, we are collaborating industry-wide to develop multiple layers of protection to minimize health risks for passengers and crew throughout the travel journey.

Boeing aircraft are designed to maximize cabin air quality using high-efficiency particulate air or HEPA filters that trap 99.9% of particulates. And the air in an airplane is exchanged a minimum of 20 to 30 times per hour. That compares to 2 to 5 times per hour in a typical building environment.

As we further enhance health measures, we have also entered into patent and technology licenses with partners in this field to manufacture an ultraviolet, or UV wand, to better sanitize airplane interiors. Of course, in-cabin technologies like the HEPA filter and this UV wand also have to be combined with personal responsibility of passengers and crews, including wearing face masks and taking other precautions, all of which are critical to creating a safe travel experience.

We're seeing encouraging industry data validating the safety of air travel. Recently, IATA published data outlining that of the over 1 billion people who have traveled by air this year, there have been fewer than 50 documented cases of transmission. This research was reinforced by a recent study by the U.S. Transportation Command and United Airlines that found the risk of contracting COVID-19 while flying is very low. We know this will be top of mind for anyone traveling, and we're here to support our customers every step of the way.

This period of reduced air travel underscores how fundamentally the aerospace industry is to the global economy, to global trade and to global cooperation. Our airline customers and suppliers not only employ millions of workers, they also serve as a connecting and driving force to the entire global economy.

That's why we fully support our airline customers in their continued discussions with the U.S. and global governments on potential additional support during this pandemic. I'm certain leaders at every level of government understand the important role airlines serve in our country.

We're also doing everything we can to support our global suppliers, and their stability remains a very key watch item. It only takes one part of our -- one part to delay production of an aircraft or delay service delivery, so we have to work together as an industry to get through these difficult times.

Internally, we're also taking tough but necessary action to adapt to the new market reality and transform our business to be sharper and more resilient for the long term. As we shared last quarter, we continue to resize and reshape our business to align with our smaller market.

COVID-19's continued impacts have had a more prolonged and deeper impact on our industry, and we'll have to further reduce our workforce. Each of our business units and functions will carefully make staffing decisions that prioritize natural attrition and stability in order to limit the impact on our people and our business.

With this approach, we expect additional voluntary and involuntary reductions. Combined with natural attrition, these reductions will bring the size of our workforce to around 130,000 employees by the end of next year. We will continue to assess our market and adjust our plans as appropriate. These decisions are not easy. They represent critical actions to ensure we're able to navigate through this global pandemic and be in a position to deliver for our customers on the other side.

As we work through these challenging times, our focus on our values and our priorities has not and will not waver. We are working tirelessly to strengthen our culture, to improve our transparency, rebuild trust and ensure we are always delivering the highest safety and quality standard.

We continue to implement a series of meaningful changes announced 1 year ago to strengthen the safety practices and culture of our company. As we've shared, we stood up our new product and services safety organization and brought together over 50,000 teammates into a single engineering organization. We're also making significant progress on our enhanced enterprise safety management system, with an initial focus on our

Commercial Airplanes business. We are working to ensure our system meets the regulators' tougher standards and reflects industry best practices as well as lessons learned from a number of independent reviews that have taken place over the past 18 months.

We've also developed a racial equity and inclusion action plan. This will raise the bar for progress on key measures of equity and inclusion for our people and hold us accountable for clearing that bar.

We also remain focused on sustaining critical investments in our business, innovating and operating to help make the world a better place for future generations. This quarter, we appointed a Chief Sustainability Officer, a leadership position dedicated to galvanizing and advancing our environmental, social and our governance priorities. This is an important step as we continue to elevate our focus on sustainability in partnership with our customers, our suppliers and our communities.

In the face of tremendous challenges we are all confronting, I am incredibly proud of how our teams have remained focused on meeting our customers' commitments. Working closely with the FAA and other global regulators, we're continuing to make steady progress toward the safe return to service of our 737. Over the past 1.5 years, there have been around 1,400 test and check flights, over 3,000 flight hours completed on the airplane.

While we still have work ahead of us, we're encouraged by the rigorous certification and validation flights conducted by the FAA, by Transport Canada and the European Union Aviation Safety Agency, EASA. The joint operational evaluation board featuring civil aviation authorities from the United States, from Canada, Brazil and the European Union also conducted its evaluations of updating [indiscernible]. We also continue to work closely with other global regulators, including the Civil Aviation Administration of China, among others.

These are important milestones in the certification process as our global regulators progress through a comprehensive, robust and transparent process, and we will continue to follow their lead in the steps ahead. Our assumption has not changed from last quarter. We continue to expect the necessary regulatory approvals to be obtained in time to support resumption of deliveries during the fourth quarter of this year. Of course, the actual time will ultimately be determined by the global regulators.

In addition to the 737, we're making progress across our commercial, defense, space and services businesses, and I'll highlight a few. Our 777-9 flight test program progressed through this quarter as the final test airplane joined the fleet. The U.S. Air Force and Boeing team were awarded the

Collier Trophy for aerospace excellence for the X-37B autonomous spaceplane. Our Boeing defense systems team secured an important contract for 8 F-15EX advanced fighter jets for the U.S. Air Force. And also in the quarter, our T-7A Red Hawk advanced trainer earned the first eSeries designator from the U.S. Air Force, given to an aircraft that is designed, engineered, built and tested along a digital thread. And our Global Services signed -- team signed an agreement with GE Capital Aviation Services for 11 Boeing converted freighters and secured a 6-year support contract for Australian P-8As.

On the 777X, we continue to work with the regulators on certification work scope, including reflecting the learnings from the 737 cert process. As with any development program, these are -- there are inherent risks that can affect schedule. While we continue to drive towards entry into service in 2022, this timing will ultimately be influenced by certification requirements defined by the regulators.

In addition to making progress across our programs, we're also taking action across the enterprise to transform our business and create additional competitive advantage. Greg will provide more details in his remarks.

With that update in mind, let's turn to the next slide to discuss the industry environment. Earlier this month, we released our 2020 Boeing market outlook, which forecasts a total market value of $8.5 trillion over the next decade, down from $8.7 trillion a year ago due to the impact of the pandemic, most of the adjustment in the near term. Overall, the defense and space market remains significant and relatively stable, and we continue to see solid, global demand for our major programs. Nonetheless, the scale of government spending on COVID-19 response has the potential to add pressure on global defense spending in the future. Broad support for our defense portfolio was underscored by the $5 billion of orders that BDS booked in the third quarter across key franchise programs.

The market outlook for our government services business also remains stable, driven by both domestic and international military aircraft fleet expansions. Our global -- our government services, defense and space programs will help provide critical stability for us moving forward.

Turning to the commercial market. While many of our key long-term fundamentals remain intact, we project near-term market pressure with COVID-19. Airlines globally have begun to recover from the trough of greater than 90% decline in passenger traffic and revenue earlier this year. In fact, earlier this month, the TSA screened over 1 million passengers for the first time since mid-March. However, the overall recovery has been at a slower pace than we originally anticipated.

As the domestic market recovery continues, the international markets remain at all-time lows. August domestic passenger traffic was 49% of 2019 levels, a 51% decline, whereas international passenger traffic was only 12% of the prior year, an 88% decline.

International passenger traffic recovery remains challenged by the absence of a coordinated global policy on cross-border entry protocols. IATA recently lowered its 2020 passenger traffic forecast to a 66% decline versus prior forecast of 63% based on lower fourth quarter expectations and less international traffic.

Regional dynamics continue to evolve with bright spots in China, where domestic traffic has returned to around 2019 levels, while recovery in other regions has pulled back as COVID cases reemerge and government travel restrictions remain fluid. Airlines are incrementally returning their parked fleet to service, with approximately 3/4 of their pre-crisis fleet now active. At the same time, the active fleets are only seeing about 60% to 70% of their normal utilization rates, keeping global operations around half of pre-crisis levels. These mix trends will continue to drive an uneven recovery. The path ahead will be heavily dependent upon not only the virus but also wide-scale progress on rapid testing, coordinated policies to alleviate travel restrictions and timing and availability of a vaccine.

As we look to the medium and long term, we see our original prognosis, more or less, still holds. Consistent with IATA and other industry groups, we still expect it will take around 3 years for travel to return to 2019 levels and a few years beyond that to return to long-term growth trends.

Demand for narrow-body aircraft is expected to recover faster than wide-body demand as domestic and regional markets will outpace longer-haul international routes. Availability and wide distribution of a vaccine may help accelerate the demand improvement. However, in the near term, we expect continued uncertainties as the situation remains very dynamic with many variables.

Our 10-year commercial airplane market outlook is approximately 11% lower than what we assumed a year ago, with wide-bodies more significantly impacted than narrow bodies. From a 20-year perspective, we still see the impact of COVID, but to a lesser extent as traffic reverts to long-term trends over time.

Near term, we also anticipate accelerated retirements, driving replacement demand up to approximately 48% of deliveries over the next 28 years -- 20 years. That compares to 44% as previously projected. As our customers focus on retiring their oldest and least efficient airplanes, new airplanes will allow the industry to reduce emissions and make future flying even more environmentally sustainable. Airplanes that we plan to deliver this year will be as much as 25% to 40% more fuel-efficient than the airplanes they're replacing.

As we see airlines adapt to these market realities, price differentiation and versatility will be key. Our market-leading product line remains well positioned to meet our customers' needs and supports airline plans to gain efficiencies as they reach for their emission goals. Our attractive portfolio and the diversity of our backlog provides a strong foundation for long-term success.

In the commercial services market, although we believe we've seen the low watermark in terms of demand, the recovery has been slow, and we continue to anticipate will take multiple years to reach previous demand levels. Accelerated retirements will also result in a newer fleet as we emerge from the pandemic impacts, which will reduce services demand and prolong its market recovery.

Digital solutions are emerging as a critical enabler as customers focus on leaner operations. Life cycle services and support will help customers scale their operations to meet efficiency and cost objectives aligned to market recovery trends. Our broad services portfolio and deep customer knowledge position us well to support these customer needs.

Now let's turn to commercial airplane production rates on Slide 4. We've maintained our prior assumptions regarding our production rate plans across all commercial airplane programs. However, the market continues to be dynamic, and we will monitor as we prudently balance supply and demand. We're closely watching the international passenger traffic recovery, which, so far, has been weak, to assess downside risks to our wide-body program production rates, in particular, the 787. We still expect to produce the 737 at very low rates for the remainder of 2020 and gradually increase the rate to 31 by the beginning of 2022, and expect further gradual increases to correspond with market demand. We will continue to assess the delivery profile for 2021 as it will help inform if we need to adjust our 737 production rate ramp up. We will continue to keep our supply chain apprised of our plan.

At the end of the third quarter, we have 3,400 aircraft in our 737 backlog. Although this remains an unprecedented and uncertain time, we are confident air travel will return. And when it does, we will be positioned to support our customers.

And with that, let me turn it over to Greg.

Gregory Smith

Great. Thanks, Dave, and good morning, everyone. Let's please turn to Slide 5. As Dave mentioned, this moment is among the most difficult in our company's 100-plus year history.

Since the beginning of the pandemic, we have taken prudent and decisive action in attempt to get ahead of this to preserve cash so that we can navigate this crisis and also reshape our business so that we can merge as a sharper, more resilient and more competitive company. We are being and will continue to be proactive and look around corners to assess risk factors and take appropriate action. We've been focused on derisking our business and a disciplined cash management for some time, and COVID-19 has accelerated these efforts further. I'll go through a quick time line of our early actions we've taken in 2020 and then provide you with an update of our transformation efforts.

Starting back in the middle of March, as the potential risk of the virus escalated, we took a proactive step to fully draw down on our $13.8 billion delayed draw term loan. Given the uncertainty of the markets at that time, we understood that this was a prudent step to bring that cash on our balance sheet.

Almost immediately thereafter, we suspended our dividend and terminated our share repurchase authorization. Even then, at the early stage, it was clear to us that liquidity would be critical through this pandemic. These early decisive actions were critical and important.

Next, in early April, we rolled out our first voluntary layoff program. We recognized the need to reduce our staffing levels, given the sharp reduction in commercial aircraft demand. And we took action to limit the impact on our teams as much as possible through voluntary opportunities first. This was followed by involuntary layoff programs.

By the first quarter earnings, we announced additional actions, including reducing our commercial production rates, limiting discretionary spending and lower overall staffing levels by about 10%. While difficult, all these steps were critical in the early days of this global crisis.

Shortly thereafter, we went to the bond market and raised $25 billion, which has proven to be instrumental to helping us navigate this crisis. The strong investor response reflected the confidence the overall market has in our future as well as the shift -- swift action that the U.S. government took to support the credit markets.

Throughout the spring and summer, we stayed very closely engaged with our customers and suppliers, working to understand the impacts of the pandemic so that we could recalibrate our industry while maintaining as much stability as possible. And by the second quarter earnings, with a deeper understanding of the prolonged impact, we further reduced our commercial production rates and announced that we would further reduce our staffing levels.

As you'll also recall at that point, we formally rolled out our business transformation efforts to assess every aspect of our business across 5 key pillars of infrastructure, overhead and organization, portfolio and investments, supply chain health and operational excellence. I'll share more updates on these shortly.

In August, we moved forward with our second voluntary layoff program, which was much broader than our initial program and included our executives, which are then followed by another involuntary layoff program. We managed this process very closely to ensure continuity where necessary, and to maintain confidence in our ability to deliver on our commitments to our customers.

Next, we rolled out a series of organizational realignments to streamline and simplify how we operate. Also, through our 787 study, it became evident that the consolidation to a single production location in South Carolina will make us more efficient and lower production and better positioned for the future. As a result, earlier this month, we made the decision to consolidate the 787 production in South Carolina by mid-'21. We are approaching these business transformation efforts with rigor and thoughtful evaluation at each step.

We have made notable progress across all 5 pillars of our business transformation efforts. We will utilize this time when we are at the lower production rate environment to reinvent and to improve our business processes.

First, regarding our infrastructure pillar. We're assessing our overall facility and site footprint in light of the reduced demand. The consolidation of the 787 production is an example of this. At the same time, we're also taking into account new flexible and virtual work opportunities. If you asked us 8 to 9 months ago if we thought a large portion of our workforce could work virtually while still being productive, you might have heard skepticism. But these last several months have shown us that we can be more flexible. Building on the lessons of our experiences, we're studying an enterprise footprint optimization effort, utilizing flexible and virtual workplace planning.

We're starting with a few pilot programs over the coming months, which will help determine our best path forward.

At the same time, we're also looking to make more efficient use of our square footage, and in some cases, reduce the overall footprint. Through staffing reductions and our flexible workplace program, we anticipate a reduction of approximately 30% in office space needs compared to our current capacity. We're reviewing every piece of real estate, every building, every lease, every warehouse, every site to look at how we can be more efficient, and we'll share our decisions as we make them.

Turning to our overhead and organizational pillar. This is where we've been looking critically at our cost structure, at how Boeing operates and how we're organized, benchmarked to top-quartile standards so we can simplify, reduce layers, reduce bureaucracy, while ensuring we strengthen connections vital to safety, quality and performance.

As an example, we're studying how we organize our production and development programs better by reducing the layers between program leadership and the factory floor, increasing our management spans and control, and improving direct and indirect ratios. These actions are aimed at enhancing communication, empowering our teams and creating lasting efficiencies in how we do our work.

Moving to our portfolio and investment pillar. We're shaping our portfolio and aligning our investments to focus on the core business, market opportunities and sustainability efforts. In addition to the impact in demand near term -- on near term, COVID-19 will also impact the timing of new market opportunities. Prior to the pandemic, we were investing for -- in growth markets and growing business. But as the market conditions have changed, have -- we have made swift decisions to adapt. You've seen us start to reprioritize our investments, and we will continue to do so and make prudent decisions going forward.

We originally plan to invest over $6 billion this year. Through prioritization, we have pared back these investments by approximately $2 billion. That said, we have and we will continue to invest in all lines of our business. In fact, we've invested more than $60 billion over the last 10 years in key strategic areas of our business.

As we take action in this pillar, we will not lose sight of our future and the exciting technologies that will reshape the future of air travel. Our guiding principle here is that every decision we make must help us navigate through this difficult period while also not diminishing our future competitiveness.

Moving to supply chain pillars, Dave mentioned our suppliers are experiencing the same pressure that we are. Many of them are small businesses without our portfolio of diversity and scale. Our teams are actively talking to our suppliers every day. We have to work together as an industry to get through this difficult time so that we can come out of this healthy on the other side. We have made enhancements of our supply chain risk assessments and are closely monitoring each supplier, mitigating issues, exploring financing solutions and getting creative and supporting them in the best way we can.

The reality is that our industry as a whole will simply build less over the coming years. And we have to help our industry partners recalibrate to that lower demand in the near term, while maintaining stability as much as possible and positioning to return to growth in the medium to long term.

We're also transforming our transportation, warehouse and logistics approach to streamline our warehousing network, set enterprise standards and improve efficiencies. We're targeting a greater than 20% improvement to our internal material management costs while driving down our freight transportation spend and optimizing our warehousing operations. And we're also reducing our indirect and overhead spending on things like capital equipment, facility support and enterprise services. We have an opportunity to significantly reduce our overall indirect spending, and we will be closely managing this process to ensure we continue to drive the highest levels of safety and quality.

Lastly, we're working diligently to accelerate operational excellence across the enterprise so that we can improve performance, enhance quality, safety, reduce rework and associated costs. The enterprise operations team successfully launched the formation of 4 company-wide process councils around supply chain, program management, quality and manufacturing. These councils are already driving integration and accelerating efforts to enhance program performance. We have simplified our structure to allow the process councils to lead on driving accountability and decision-making closer to the work that's being performed.

When and where we identify issues at a program level, we're implementing thorough corrections, transparency, sharing information with our customers and strengthening processes across the enterprise to enhance first-time quality in every program. These are just a few underway across the business. And over the coming weeks, months and years, we'll keep you up-to-date on the transformation journey.

Our focus here is clear. We're taking comprehensive action to preserve liquidity, navigate the pandemic, adapt to our new markets, improve performance and position our company for the future. As we take these actions, we're ensuring that every step only furthers our drive key efforts in safety, quality and delivering on our commitments. These efforts are meant to create meaningful and lasting change to how we operate and our cost structure.

The financial objectives we've established are measured in billions of dollars, and we expect them to be executed over a multiyear period. In the current environment, we must take these actions to adapt to lower demand. What we're trying to achieve here are sustainable, structural, lasting improvements in our performance that lay the foundation for future margin expansion and cash flow generation as the market recovers.

So with that, let's turn to Slide 6 for our third quarter results. Our financial results continue to be significantly impacted by COVID-19 and the 737 MAX grounding. Third quarter revenue of $14.1 billion reflects lower Commercial Airplane deliveries and commercial services volume, primarily, again, due to COVID-19.

Earnings in the quarter were also impacted by charges for BCA abnormal costs related to the 737 program and severance costs for the additional approximate 7,000 employees leaving the company through the end of '21. These impacts were partially offset by an income tax benefit related to the NOL carryback provision in the CARES Act as well as the impact of pretax losses.

Let's now move to Commercial Airplanes on Slide 7. Revenue was $3.6 billion, reflecting lower Commercial Airplane deliveries due to the significant impacts of the pandemic, as well as 787 quality issues and associated rework. BCA third quarter operating margins declined primarily due to lower delivery volume and a $590 million of abnormal costs related to the 737 program.

Similar to prior period, in preparation for our third quarter financial statements, we have made certain assumptions on production rates across all programs as well as the 737 MAX delivery profile. As Dave mentioned, we've assumed that the timing of the regulatory approvals will enable 737 deliveries to resume during the fourth quarter of 2020.

We currently have approximately 450 737 MAX aircraft built and stored in inventory. We expect to have to remarket some of these aircraft and potentially reconfigure them, which will extend the delivery time frame. We now expect delivery of about half of the aircraft currently in storage by the end of next year and the majority of the remaining in the following year.

Delivery from storage will continue to be our priority after assisting our customers with their return to service. We expect the 737 MAX delivery timing, along with the production rate ramp-up profile to continue to be dynamic as they will ultimately be dictated by the pace of the commercial market recovery, which has been slow and remains uncertain. There is no material change in the estimate for the total abnormal cost of $5 billion, and we expect these costs will be expenses incurred over this year and next year. During the third quarter, we expensed $590 million of abnormal production costs, which brought the cumulative abnormal cost expense to date to $2.1 billion.

Our assessment of the liability for the estimated potential concessions and other considerations to customers for disruptions related to the 737 MAX grounding and associated delivery delays did not change significantly in the third quarter. Cumulatively, we've accrued a $9.1 billion liability for the estimated potential concessions and other considerations. To date, we've made $3.1 billion of payments to customers in cash and other forms of compensation, including $500 million we paid this quarter. We have settlement agreements covering approximately $2.6 billion of the remaining liability balance of $6 billion.

We continue to address the impact individually customer by customer, including assessing the efforts that the MAX disruption is having on their operations in light of the COVID impact. We also continue to expect any concessions or other considerations to be provided over a number of years with the cash impact to be more front-end loaded in the first few years. Any changes to these assumptions could require us to recognize additional financial impacts.

Commercial Airplanes backlog includes more than 4,300 aircraft valued at $313 billion. The decline in backlog in the third quarter reflected the aircraft order cancellations and the removal of aircraft orders from our backlog due to ASC 606 accounting standards.

As you saw in the second and third quarter, our production has outpaced our delivery rate. And we expect this to continue in the near term, resulting in higher finished goods inventory. We have a large number of undelivered 787 aircraft in inventory, and we are working with our customers to facilitate their deliveries.

The burn down of 787 inventory over the next few months will largely be influenced by the pace of delivery activities, which has been and expected to remain relatively slow due to the additional time we're taking to inspect and ensure each of our 787s are delivered to our highest quality standards.

We're also closely watching the international passenger traffic recovery, which so far has been weak and is more challenging than what we anticipated last quarter. The trend going forward is heavily dependent on the virus, testing, coordinated policies to alleviate travel restrictions and timing and availability of a vaccine. We will continue to assess the downside risk of our production rates going forward.

Let's now move to Defense, Space & Security on Slide 8. Third quarter revenue decreased slightly to $6.8 billion, reflecting derivative aircraft award timing, partially offset by higher fighter volume. Third quarter operating margin decreased to 9.2%, primarily reflecting less favorable performance, including a $67 million KC-46A tanker charge due to continued COVID-19 disruptions and productivity inefficiencies.

During the quarter, BDS won key contract awards worth $5 billion, including a contract extension for the International Space Station for NASA and a contract for 9 additional Chinook Block II helicopters for the United States Army Special Ops. Our backlog now stands at $62 billion, with 30% from outside of the United States.

Let's now turn to Boeing Global Services results on Slide 9. In the third quarter, Global Services revenue declined to $3.7 billion, driven by lower commercial services volume due to COVID-19. This was partially offset by higher government service volume. Operating margin in the quarter reflected lower commercial services volume and an additional 7 truck costs.

During the quarter, BGS won key contracts worth approximately $3 billion, which brings its backlog now to $17 billion. Although we saw a slight uptick in service demand in the third quarter, we predict the recovery would take multiple years, and we continue to take action to position our services business for the future. This includes not only employment actions and inventory rightsizing, but also making sure we have the right product, right service solutions to help our customers and industry navigate the downturn and scale their operations as near-term demand trends upward.

Let's now turn to cash flow on Slide 10. The disruption caused by COVID-19 on our airlines and the global economy continues to put significant pressure on our cash receipts. Operating cash flow for the third quarter was negative $4.8 billion driven by commercial -- lower Commercial Airplane delivery volume, advanced payment timing and commercial services volume. We achieved solid cash generation from our government programs and continue to expect future cash flow to be roughly in line with earnings from our government side of the business.

The continued slow and uneven commercial market recovery is significantly impacting our cash flow and increasing pressure in the near term. We currently expect 2021 cash flow to be much improved from 2020, driven mainly by deliveries and inventory burn down associated with 737 and 787 programs. And we anticipate the cash profile to continue to improve further from '21 to 2022. While we're still aiming to turn cash positive in late '21, the recovery and the continued elevated virus cases make the path much more challenging. Based on what we know today, it's looking more likely that we will be cash flow-positive in the 2022 time frame.

Our cash flow trajectory will clearly be dependent on the pace of commercial market recovery and how customer deliveries progress moving forward. Progress on testing protocols, government travel restrictions and vaccine will be the pacing items. And we will continue to diligently work opportunities and monitor risk factors, given the dynamic nature of this current environment.

Let's move now to Slide 11, and we'll discuss our liquidity position. We continue to proactively manage our cash and assess our liquidity daily through this challenging time.

We ended the third quarter with strong liquidity, including $27.1 billion of cash and marketable securities on our balance sheet and access to our $9.5 billion bank credit facility, which remains undrawn as well as continuing to assess the capital markets. Our debt balance at the end of the quarter was $61 billion. And through the end of the year, we have just under $4 billion of debt maturing. To further bolster our liquidity as we work through the impacts of this pandemic, we may seek to refinance that maturing debt in the fourth quarter this year.

In addition, we've decided to use Boeing's stock rather than cash to fund our company contribution to employees' 401(k) plans for the foreseeable future. This will preserve approximately $1 billion of cash gradually over the next 12 months. We also plan to make a discretionary contribution to our defined benefit pension plan in the fourth quarter, totaling $3 billion, which will also be funded by Boeing's stock. This move will further strengthen the funded status of our retirement plans to benefit our employees and retirees while improving our balance sheet position and minimizing future cash outflows.

As we mentioned previously, we expect our use of cash due to COVID-19 to continue for the remainder of this year and into '21. Therefore, proactively managing our liquidity and balance sheet leverage will continue to be top priorities as we navigate this challenging environment. Once cash flow generation returns to more normal levels, reducing our debt levels will be our key focus area. These actions reflect our continued derisking strategy and as part of our balanced approach to ensuring we proactively meet future obligations. We worked hard in the past to maintain disciplined cash management while seeking opportunities to strengthen our balance sheet, and we will continue these efforts.

Let's just now turn to the last slide to summarize. We covered a lot today, but I want to provide you further clarity on our approach and our actions in addressing the profound impact the pandemic has had on our company and our industry.

Through this tough time, we have focused on the health and safety of our employees and communities while working closely with our customers and suppliers to navigate this global pandemic and rebuild stronger on the other side. We also remain focused on achieving our priorities in transforming our business to adapt to this new market reality.

As we've outlined today, we took decisive early actions to adapt, and we will continue to do so going forward. We've got the right team in place. They are focused. And we will continue to transform our business across the 5 pillars.

As challenging as this situation has been and currently is, we continue to be confident in our long-term market outlook. The mission today is clear: Stay laser-focused on the market dynamics, take proactive action across all aspects of our business with all eyes on liquidity, and emerge stronger and more resilient. We're committed to executing on actions that position our company and our industry for the future.

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

David Calhoun

Yes. Greg, thanks. This has been a year unlike any other, and we're facing unprecedented challenges in our company, our industry and our communities. I'm proud of our team, and I thank them for the tremendous work they've done through these difficult circumstances. The long-term industry fundamentals remain strong. Air travel will recover. Our portfolio of products and technology is well positioned, and I'm confident in our future.

With that, Greg and I will be happy to take your questions, and I'll turn it back to Maurita. Thank you.

Maurita Sutedja

John, we're ready for the analyst question now.

Question-and-Answer Session

Operator

[Operator Instructions]. Our first question comes from Doug Harned with Bernstein.

Douglas Harned

I'd like to understand more about the path back on MAX deliveries once we've got ungrounding, which hopefully will not be in too long. And as we look at it, you've got some number, about 450 airplanes parked, with production on a slow ramp. So -- but there are a number of issues. Like modifications will be needed for -- to these airplanes for recertification. You have an FAA inspection process that we think would affect delivery timing. And many of these parked airplanes will need to be reconfigured for other customers. So how do you think about the start-up of deliveries once ungrounding happens given these issues?

And then lastly, given the demand challenges out there due to COVID, what will ultimately be the governing factors for the timing of your ramp in deliveries over the next year or so?

David Calhoun

Yes. So there's a lot embedded, of course, in answering that question. But remember, this RTS, return to service, we've been working on this for a very, very long time. So we're confident airplanes are ready, and they will be delivered. And the cert process itself, as in ticketing each airplane, while that's somewhat new, that's a process that has been rehearsed and rehearsed and rehearsed between us and our regulator. It doesn't mean it's going to fly through.

On the other hand, I don't actually expect much delay in that process. I think we've provisioned for that. And our guess about how quickly we return these deliveries here in December, I think it's going to be fairly conservatively planned. And I think we can do better than that.

But with respect to midterm, all of the early deliveries of 737s will be, of course, to the customers who are on contract and where we will not have to do mods, et cetera. And then as we begin to think about the longer -- or the end of that stream of inventoried airplanes which do not yet have homes, we think we're going to be able to do, within cycle times, all of the reconfigurations that are going to be required. And we have to be ready for that, and our teams have positioned themselves to be ready for that.

And then the final thing I would just suggest is that what will be hostage to the movement of those airplanes will be our production rate. We're determined not to create a bigger problem than we started with. And so that production rate will stay low until the movement of those airplanes and then those that need mods are scheduled and work scope is in place such that we can predict their delivery and then, therefore, begin to inch up our production rates again.

So that's going to be pretty fluid. Your question suggests that, and my answer suggests that. But I am confident that, that all happens. And then there is a moment, honestly, somewhere in the middle of next year when maybe we're over the second wave, and maybe there's a vaccine, and maybe it's being distributed. And then all of a sudden, everyone's waking up to renewed schedules, and the psychology will lend itself, in my opinion, to a little bit of a run on the bank with respect to narrow-body airplanes. And we'll see about that. I may be dead wrong. But frankly, that's as much of my worry as just moving the airplanes we've got; it's going to be the response when the recovery really does come. I want to make sure we're stable and ready for that.

Operator

Our next question's from David Strauss with Barclays.

David Strauss

I wanted to ask, I guess, first of all, on the MAX, the 450 or so that you have in storage, what proportion of your customers have actually reaffirmed that they want to take aircraft in either '21 or '22? Because it seems like pretty much everyone's come out and said that they want very few airplane.

And then on the 87, why not take the rate down earlier, given how much inventory you've already built on that aircraft? I think you have somewhere around 50 airplanes in storage.

Gregory Smith

Yes. Look, on the 787, David, most of the inventory that we have is the result of the quality assessment that we've been doing and the rework associated with it. It's more heavily weighted there than it is customers not able to take the aircraft.

So as I mentioned, we're going to have a big fourth quarter on deliveries here, and again, paced by our inspections and quality effort. And then that will pick up in '21.

But as Dave said and I think I reiterated, that we're continuing to assess the wide-body market on a day-to-day basis and particularly linked to how we're seeing international coming back. So we're being, I think, very clear-eyed around who we've got in the backlog, the probability of delivery, the time frame, the potential movements of aircraft. And then where we've got unsold positions, what's the real probability there and risk assessing that.

So that's going to continue to be our discipline, but we're, again, very diligently focused on it. And if we have to make further adjustments down, then we certainly will to match the demand.

And maybe I'll just jump on the 37 and then hand it back to Dave. But look, on the profile around the 37s that we've got parked, really, 3 major kind of, I'd say, kind of ways we look at it. Obviously, you've seen the cancellations and contractual changes, and sometimes, those contractual changes are recontracting the airplanes to move out to further time frames. We're assessing the financial conditions of every customer and assessing that health, and then just other, I'll say, potential delivery risks, which is really tied to the recovery and the challenges across the globe with the pandemic.

So all those taken into account, we go through a pretty thorough risk assessment over that profile, including, obviously, day-to-day contact with our customers and their ability to take the aircraft in certain time frames.

But look, I'll tell you, it's dynamic. It moves around. We've got a team that's dedicated to that skyline and engaging with those customers, and we're making adjustments real time. But at the same time, doing our own risk assessment. And that is a clear eye towards liquidity. If we see more risk, how do we bolster our liquidity? If that risk does not materialize, then it's upside for us. But we're doing that to really kind of understand, I'll say, the band of risk from the baseline plan that we have in place. I don't know, Dave, if you had anything you want to add.

David Calhoun

Yes. No. I mean, it's as fluid as anything you could imagine. So again, I'm not -- I don't want to suggest that we know everything about everything. I will suggest, in light of what we have to do through -- for the accountants and for ourselves, we tend to be more conservative than our customers are with respect to their intentions. So yes, probably more than half are, in fact, planned for customers have already been through adjustments, and we're ready to go do what we're going to do. But we tend to be more conservative than they are on this front because we have to be.

Anyway, it's not a perfect world. We'll continue to update it each and every week and month, and we'll keep you informed. But we are where we are now.

Operator

Our next question is from Sheila Kahyaoglu with Jefferies.

Sheila Kahyaoglu

Greg, I think you mentioned you're unlikely to be cash positive in 2021. Can you help us square that, especially in light of some of the MAX production comments on 31 a month in 2022, which would lead us to believe some inventory unwind. And you haven't really changed production rates quarter-over-quarter. So what are the biggest drags on 2021 cash, whether it's BCA profitability, inventory or PDPs or concessions?

Gregory Smith

Yes. Probably a little bit of everything, Sheila, around that. I mean, certainly, it's become more challenging just as we've seen continued elevations of the virus, and then, therefore, the customer dialogues around the specific timing around, in particular, delivery. So all of that backdrop has made '21 more challenging.

I'd say key drivers from '20 to '21, which we expect, again, '21 to be better than '20, it's the same elements. It's certainly the 737 return to service and that ramp up, in particular, near-term focus on the parked fleet. And then the 787 inventory build, as you mentioned, that timing of the transition between this year and next year will give us some cash headwind. But overall, it's just gotten a little more challenging, specifically around whether it's PPs or actually delivery slots that's made '21 -- again, we're still shooting for it.

But having said that, based on everything we know today, it really is looking more likely that cash flow positive is going to be in the '22 time frame. But like I said, we'll continue to work it, but that's how we see it today.

Operator

And next, we'll go to Ron Epstein with Bank of America.

Ronald Epstein

Maybe a bigger picture question for both of you. It really does seem in the narrow-body market like Boeing is, I think it's been [indiscernible] fact at this point, is losing share to Airbus. I guess my question for both of you is, one, do you see it as a problem? And if you do, how can you address it given all the constraints that confront the company today?

David Calhoun

Yes. So let me take this one. Market share, without a doubt, we've lost some share. When you don't produce an airplane for a year and the other guy does, by definition, you take a big hit with respect to share.

With respect to future competitions and our airplane competing against their airplane, I don't -- I'm not going to give up any ground, and I don't believe we will. I don't think our airplane will. They have a particular part of their narrow-body fleet, the 321, that's got advantages for certain routes, without a doubt. Our airplane, in the middle part of that route, with respect to efficiency and environmental performance, frankly, and seat cost, gives us an advantage. And I'm not sure how the mix of the market is going to ultimately play out with respect to the number of routes in each. But I'm not worried about the 737 family competing against the A320 family.

And then with respect to wide-bodies, of course, I think we enjoy a big advantage, and I think we will continue that advantage despite the fact that the market's going to have a rough time. And it's going to take a while to get back.

So yes, no, I'm not sitting around, sucking my thumb that we're disadvantaged with respect to our product offering. And then the next product's going to come along. We have some incredible underlying technologies that are going to support the point design of that next airplane. We're going to assess this market based on everything that's happened in the last year and probably the next year. And I think we'll be able to call out that point design and pull these underlying technologies that we think will create a winning airplane.

So we're not out of the development business. We're still in it. This time -- or I will call it deferral of the NMA or whatever that slot was, this is actually going to advantage us in determining the point design based on what I think are some changing market conditions. But we never let up on the underlying technologies, and we will not let up. And our spending today covers those things. So yes, I'm -- I believe we've got a very competitive product line, and I'm not, in any way, going to give up any room with respect to our competitor on that front.

Operator

Our next question is from Carter Copeland with Melius Research.

Carter Copeland

Greg, I wondered, could you speak to whether there were any changes in your program margin assumptions across the portfolio? Obviously, the big decision on the South Carolina consolidation, and that was a pretty low program margin for the last quarter Q. But just in general, all these cost-out actions and the impact of those and what that means for your assumptions around cost and profit, whatnot. Any color you could give us would be helpful.

Gregory Smith

Yes. I'd say not significant change within the quarter on the booking rates, Carter. 777 was up a little bit. 87 was up a little bit. And then we were down slightly on 37 and 47 a little bit on 67. Some of that is, as you said, customer mix. Some of it's cost, and some of it's escalation. So not a lot of movement within the quarter on program.

Carter Copeland

Okay. And with respect to the comments you had on the skyline and managing the skyline, are there any kind of broader observations or themes in how that skyline is settling out from a customer type or regional standpoint, where those planes are going or how that process is evolving?

Gregory Smith

Yes. I can't sit here and say there's any specific themes. I know it's probably an overused term, but it's dynamic. So in each situation where the customer is different. It's different considering their own liquidity, access to liquidity, what their planned fleets are, what they were and what's happening within their region with regards to any government restrictions on travel. So it really varies by customer and then within time frames because some customers want to remain and have remained committed to taking deliveries but needed to move them out to the right for a variety of reasons.

So you can imagine, again, this is tail-by-tail, customer-by-customer weekly assessments by the teams that are engaging with customers. So we have a good line of sight, but recognizing we've got to be agile in it's dynamic. But then again, applying our own risk assessment to just look at it through a liquidity and cash lens to ensure that if we do see any risk building, how do we stay ahead of it? And that's the action, certainly, that we've been taking to date, and that relates to my comments around the debt maturing that we may seek to refinance in the fourth quarter as well as the actions we're taking with the pension and the 401(k).

So I can't say if there's anything specific that comes to mind as a common thread throughout other than, obviously, the significant impact the pandemic's is having on everybody.

Operator

And next, we go to Jon Raviv with Citi.

Jonathan Raviv

So just talking about defense for a moment, I think it's a pretty important part of the cash flow generation story here. But when you look at it, it doesn't seem to be growing much this year. The margins are a bit lumpy. Backlog's really kind of in the 1x, below 1x area. So what's going on there?

And maybe you can give us a full picture, including BGS government. And how do you see the future of the total defense enterprise developing over the next few years? Everyone's is seeing decelerating growth next year. Can you guys sort of change that dynamic?

Gregory Smith

Maybe I'll take a shot on the top line and the margin, and then I'll hand it over to Dave. But this is a year, certainly, if you take the production programs, steady production across whether it's the fighter business or in the rotorcraft business. But this is a year of transition, in particular, for the development programs on the T-7A and the MQ-25 and residential aircraft. So obviously, once those get out of development and start to move their way into production, you'll see the, I'll say, the modest growth associated with that.

I think, Jon, domestically, we're continuing to see good support for our core programs. But at the same time, I mean, we're competing to win there. So we're -- all this transformation effort doesn't just apply to commercial, it's really coming off the heels of what a lot of the effort we do at BDS for some time. But that mix of portfolio, Jon, on the development side is certainly impacting the margin here near term.

And then as we've seen, we've had COVID impact on the defense business, and it's been disruptive that we're experiencing on KC-46 and we've experienced on a couple of other programs this year. But outside of that, I think, again, once we move into production on the development programs, and there's no question that we've got to improve our performance on development -- overall development programs, we expect to see a more stable, growing margin there as well. I don't know, Dave, if you have anything to add.

David Calhoun

Yes. The only thing I would comment on is, one, I feel great about the franchise broadly. In our services business broadly, government now is the majority of that business. And it continues to go quite well. So I do expect some growth in that.

Two, our resource planning has not, in any way, tried to strangle government. In fact, it's been the opposite. So almost all of the reductions net that we've described across the company have been applied against our commercial franchise, so that we're not starving something in our defense business as a result of the difficulties we're having in our commercial business.

And finally, the tanker. The tanker has been a drag on us for like 3 or 4 years in every way you can think of with respect to investors. But we are beginning to clear the hurdle with our customer with respect to its performance in their fleet and then their need for that tanker. So that whole relationship, I believe, will begin to transition next year. And as opposed to being a drag on our franchise it's been, I believe it will become a strength in our franchise.

So I just -- I think in combination with what Greg said, I think that's the situation. I will say, and I said it this morning, we're not planning on defense spending to go up in any appreciable way. In fact, we believe there will be pressure on defense spending as a result of all the COVID-related spending that's been -- that governments around the world have been experiencing. So I don't think we're looking at that world through rose-colored glasses. I expect real pressure on that market.

Operator

Our next question is from Seth Seifman with JPMorgan.

Seth Seifman

Kind of a two part question on China, one kind of specific and one bigger picture. I mean, specifically, when you think about your production and delivery expectations for 737, what are you assuming in terms of when you get certification from Chinese authorities?

And then second of all, when we look at the 20-year forecast, and we see China is such a big market for new aircraft, and we think about increasingly explicit strategic competition between the two countries and their efforts over that 20-year time frame to break into the market, how do you plan for that over time? And how do you see it potentially eroding the market?

David Calhoun

Yes. So there's a narrow question and a giant question together. So let me start with the narrow one with respect to our narrow-body deliveries. We attempted quite a while ago to derisk our delivery stream on the inventoried airplanes such that we pushed out the Chinese airplanes for later delivery. And at the same time, we've had a team on the field with the CAAC, the certification body in China, for probably a better part of 2 months. And they are working through that process just like the FAA and the EASA did here in Europe. And it's been going quite well and productively, and all the technical people are lined up, et cetera.

So I'm confident that, that process will happen, and then ultimately, we can get back to deliveries. And as everyone knows, China is back in business. And the airlines need this kind of lift, and we happen to be 1 of 2 people in the world that can deliver it. And that will be that way for quite a while.

So we've had great relationships. We continue to have them. We're going to continue to manage it, and we know that there is going to be, over time, a competitive threat there. We're not afraid of it. We're going to continue to do what's right for our customers. When that threat shows up, what form it takes, ultimately, how it wants to compete around the world, we will -- we'll be up for that round of competition. I don't think that is for quite a while. And I've been around that discussion since the year 2000.

So anyway, I have great respect for China and what they want to accomplish here. But I'm -- the long view is still going to have to remain a constructive view with respect to Boeing and China, and that's where we're positioned.

Operator

Next, we'll go to Rob Spingarn with Crédit Suisse.

Robert Spingarn

Greg, I wanted to ask you a little further on cost. You talked about reducing the footprint and is laser-focused on cost. I wanted to just explore how we think about the excess capacity that gets created in Everett with the 787 leaving and the 747 concluding. I mean, is it -- would you think about moving MAX up there at some point? Or does this next aircraft that Dave alluded to go there? How do we think about that?

Gregory Smith

Yes. Just maybe just stepping back, as I mentioned in the remarks, I mean, we're looking at all of our space around the globe, Rob, and looking for ways to be more efficient. And that's certainly as we see it today with the work that's in there, but as Dave said in his response to some of the BDS question, we're not -- we're looking forward as well. So we're trying to take all of that into consideration and be strategic about it.

But the fact is that all of our facilities are not fully utilized, and we need to get them fully utilized. And we got to do that in a very methodical way and do it as a company and doing it together about how do we think about, strategically, how do we get our utilization improved and overall efficiency.

So it doesn't really just center around one site. I mean, that's certainly an important part of it. But it's every building, every lease, every office space, looking at current near-term demands, but also kind of future potential opportunities and so on. And every one of our decisions is going to be looking through all those lenses before we make it.

But make no mistake about it. It's all about being more efficient and having improved utilization. As I mentioned, just in office space alone, we're targeting something like a 30% reduction there, and we'll continue to do so. And like I said, it's across all aspects of real estate. So more to come on it. We're...

Robert Spingarn

Right. So you're not ruling out big changes?

David Calhoun

We're not ruling out -- no, we're not ruling out big changes. But just by way of how we think about it, that Everett space that's freed up, I mean, we're going to line it off for quite a while because I don't want to move lines from one place to another just because it's available. And for the most part, our reinvigoration of all things lean in Boeing, and this is really related to workflow and the use of the capacity that we have, will suggest that we can actually produce a lot more in the same or even smaller footprint than we do today. So we're going to stay on that program, and we're going to line off the things that get freed up as a result of decisions like the 787 and the 47, et cetera.

And we're not going to just try to fill it. We also need the market to return. We need to see where all the demands really ultimately play out and where that next footprint really needs to sit. We know we have some great skills in that area, there's no doubt. And that matters a lot, and that will factor. But we're not just going to try to fill empty space. That would be -- that would not be in our best interest.

Operator

Our next question is from Myles Walton with UBS.

Myles Walton

The question I had was really a clarification leading to a question. So the clarification on the $1 billion of equity sale stock towards the 401(k) sort of on an annual basis, I guess, on a go-forward basis, and then the $3 billion to the pension plan. Is that $3 billion prefund for a number of years, such that it's sort of a one-and-done for a few years? And then is the 401(k) more of an ongoing?

And then, Greg, is this open -- the question, obviously, to a broader equity issuance to rebalance the portfolio -- the balance sheet, rather, above and beyond what this is. What would make you consider that?

Gregory Smith

Yes. No. I mean, well, first of all, the way you're thinking about the 401(k) and pension is right. So the pension will be -- really is, like I said, it's an attempt to really minimize the outflow over the next several years. So as we see it today, contributing the stock at an amount of $3 billion really takes that risk off the table. So ultimately, it should help our cash flow profile going forward.

And like I said, the 401(k) is, yes, it's more of kind of an annual approach to that. But the whole idea on the balance sheet between debt and equity and so on, I mean, we're, again, diligently focused on what levers we have, how do we derisk. Certainly, our credit rating is significantly important to us and our overall balance sheet health. So it's a balance. It's a continuous balance of the 2.

And we think between what we've done and what we are doing internally, combined with the debt and the bank drawdown, and now, with this, think of that, again, as just a continuous balanced approach of looking through each one of these areas and trying to find the right mix. As I did mention, too, we've got $4 billion of debt maturing over the next year. So we'll again look at that and look at potentially refinancing that.

So again, it's a very balanced approach in understanding the second, third order effect of each of them. But the objective here, again, is just to try to stay ahead and manage our liquidity as we have on a day-to-day basis. But again, looking beyond our baseline plan around the possibilities with some of the near-term challenges and pulling the appropriate levels at the appropriate time. And this 401(k) and pension, we believe, is -- fits right into that category.

Operator

And next, we'll go to Kristine Liwag with Morgan Stanley.

Kristine Liwag

With your decision to fund the pension with Boeing stock, I guess, I would have thought that free cash flow in 2021 would have been incrementally positive. So first, were you initially expecting to fund the pension in 2021, and were you expecting to do that with stock? And then also second, can you provide a little bit more color on the moving parts and operating cash flow in 2021 and any onetime items so we can bridge to your positive outlook in 2022?

Gregory Smith

Yes. So Kristine, the pension funding or -- as you know, it all depends on the rates and the discount rate. But as we kind of modeled it, we started to see in the '22 time frame and beyond some incremental funding requirements. So we essentially, like I said, pulled that forward. We didn't see a significant amount of funding required in '21, but we did start to see some of it in the years beyond that.

So this was again an opportunity to pull that forward and utilize our stock and improve the cash profile going forward. So net-net, as you know, we've done it before, and we know how to do it. And we think it was, again, a prudent thing to do. All part of just consistently reviewing the capital structure strategy and balancing the funding approach to the pension in particular.

As far as '20, I'll say, kind of '20 to '21, again, I'd say the key elements are very similar to what we talked last time, but the level of contribution is evolving and changing year-over-year. So as you bridge to an improved cash flow, which it will be, as we see it today in '21 over '20, 737 MAX is the single biggest contributor. So getting return to service, starting to deliver off the ramp, and then as Dave said, informing our production rates, and then ultimately, the marketplace and what the recovery looks like, that's going to be the single biggest driver.

Outside of that, the next one is the 787. As I said, we're building inventory, and we'll have that inventory and delivery profile aligned into '21, and that will be your second largest contributor to '20 over '21 as it sits today. Those are the two single biggest. If you look at year-over-year, as we see it today with services or defense, it's pretty much in line with how we think we're going to finish this year. So it really does narrow down to those 2 product lines, in particular, with the 737 being the biggest contributor.

Maurita Sutedja

All right. John, we have time for one last question.

Operator

Great. And that will be from Peter Arment with Baird.

Peter Arment

Greg, just on the 787, the consolidation move final assembly to one facility in South Carolina, maybe just -- maybe you can just talk through how you're thinking about -- does that change any kind of outlook on the times of the profitability of the overall program? Or how you're thinking about the kind of the productivity gains that you'll be able to achieve with -- at one facility?

Gregory Smith

Yes. I think, as you know, Peter, it really kind of starts with the market outlook that we had, and then looking at efficiencies, and then, ultimately, how do we become more competitive. And this is certainly a key contributor to that. As far as a program margin perspective, not a -- it won't have a significant impact on that certainly near term.

But as Dave said earlier, we're looking beyond the current rate and looking at rates beyond where the marketplace is today. And that's ultimately where we'll see much more efficiencies, and particularly around logistics, going from the mid and half body right over into final assembly and not having the transportation logistics associated with that, and having the dedicated crews and the cycling, again, we'll see the efficiencies. But really, we'll capture it more at the higher production rates.