Operator

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

At this time for opening remarks and introductions, I'm 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 and good morning. Welcome to Boeing's second quarter 2020 earnings call. I'm Maurita Sutedja and with me today are David Calhoun, Boeing's President and Chief Executive Officer; and Greg Smith, Boeing's Executive Vice President of Enterprise Operations, Chief Financial Officer and Interim leader of Communications.

After management comments, we will conduct a question-and-answer session. In fairness to others on the call, we ask that you please limit yourself to one question. 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. Good morning, everyone.

I hope you are all continuing to stay safe and healthy during this crazy global pandemic that we're all living through. Before getting started, I want to recognize all of the health care professionals, the public servants, the frontline workers who are dedicated to keeping us safe and healthy day-in and day-out. On behalf of all of our Boeing Associates, thank you.

I also want to thank my Boeing team-mates around the globe for everything they are doing to support each other, our business, our communities and our customers during these intensely challenging times.

With that, let's turn to business and Slide 2, please. The current challenges we have are of unprecedented proportions. I think we all know that. This is true for our company, true for our industry and our society at large. In times of uncertainty, it is important, we focus first on our people and that is where I'll start today.

We're working hard to strengthen our culture, support our workforce and to help our communities. The racial equity and social justice movement reminds us that we must do more to confront racism head-on. I'm proud of our Boeing team's commitment to this and the progress we've made over the years. But I recognize, we recognize, we have more work to do.

We're raising the bar on our key measures of equity, diversity and inclusion and over the next four years, we will double the $25 million we've invested in partnerships and organizations that support marginalized communities. Our commitments in this area will be an even more permanent and visible aspect of our engagement going forward.

Turning to the COVID-19 pandemic. As cases rise in certain areas, we are focused on keeping our people and our communities safe. As you know, during March and April, we temporarily suspended some of our operations due to cover COVID-19. We resumed operations and brought our teams back to work only after implementing objective and rigorous steps aligned with federal and state guidance, to ensure the health and safety of our workforce.

We are taking all responsible measures across our facilities, including requiring face coverings, enhancing facility cleaning, adding visual indicators. We are modifying work areas and adjusting work patterns to allow for physical distancing, providing access to medical information around the clock, quarantining anyone potentially exposed to the virus, and conducting contact tracing and much more.

For all of our employees whose jobs can be done effectively from home, we continue to implement virtual working arrangements. We believe we've put effective processes in place that enable our facilities to be as safe or safer than their respective communities. Nevertheless, we will remain vigilant and follow the advice of our health care professionals and adhere to the government guidelines as we monitor the virus.

As our employees focus on their own health, they are also stepping up to help their communities through the crisis. I couldn't be more proud of their efforts and I'll highlight just a few of their contributions.

To-date, we've printed more than 40,000 face shields and completed 12 airlift missions, delivering 4 million units of personal protective equipment to health-care workers in need. And combined with our Gift Matching Program, our employees have donated $1.5 million to support COVID-19 response efforts in their local communities.

COVID has also dealt a heavy blow to the commercial aerospace sector and our business. Airlines have cut back operations dramatically. As they assess their business, they are making difficult decisions that result in grounding fleets, deferring airplane orders, postponing acceptance of completing orders and slowing down or stopping payments. They are also accelerating aircraft retirements, deferring elective maintenance, and requiring fewer service. That is why we are working closely with our customers and suppliers to navigate through this uncertainty.

We continue to monitor the commercial marketplace by staying very engaged with our customers around the globe to fully understand their short-term, medium-term and long-term requirements. We have and we will continue to work with our customers on specific timing and adjustments to their deliveries. We will discuss this further in the business environment part of this discussion.

As air travel resumes and restrictions ease around the globe, aircraft crew and passenger health and safety are always our top priority. Through our Confident Travel initiative, Boeing is supporting our customers and working with industry stakeholders to support multiple layers of protection aimed at minimizing health risks for passengers and crew throughout the travel journey. Layered with protection is a system-wide approach with customers, airports, regulatory authorities and industry associations all having a role to play.

First layer is having measures in place to prevent anyone with the virus from boarding the airplane. The second layer is assisting airlines on cleaning and disinfecting practices. The third layer is to minimize contaminants from spreading in the cabin itself through to the design of cabin air flows, the use of HEPA filters and encouraging passengers if not requiring passengers to wear face coverings.

In-cabin technology, enhanced cleanliness standards, airflow systems and other preventative measures are helping protect the health and safety of every person who steps on-board Boeing airplanes. These have to be combined with personal responsibility of passengers and crews, including wearing face masks and taking other precautions, which is a critical part of creating a safe travel experience.

Another important aspect of bridging to recovery is ensuring the health of our supply chain. We're doing everything we can to support our global suppliers and their stability remains a key watch item for us in the aerospace - as our aerospace industry weathers these unprecedented challenges. We're monitoring our supplier status around the world to assess risks and to address any potential disruption.

We've been continuing payments to our more than 12,000 suppliers supporting about 1.5 million jobs. As we discussed last quarter, given the severe nature of this virus and the shock, to preserve the long-term competitiveness of our industry as well as our company, we are intensely focused on ensuring the liquidity through the intermediate crisis. We've taken aggressive liquidity steps over the past few months, including raising $25 billion in the capital markets in May. While we've addressed the immediate liquidity issue, we still must continue taking action to improve our performance and transform our business for the future.

In the second quarter, we completed the realignment of our Engineering Organization and the integration of our new Enterprise Operations Finance and Strategy Group. These moves our foundational steps in our effort to strengthen engineering, to elevate the company's focus on safety and quality, improve operational, factory and supply chain performance and streamline our processes.

And lastly, despite the challenges we face, we've not lost sight of our commitment and our need to deliver on our priorities, which have not changed. We're continuing to make steady progress toward the safe return of the 737 to service, working closely with the FAA and other global regulators.

While we still have a lot of work in front of us, we are encouraged with the completion of the FAA certification flight test earlier this month and the FAA's announcement to move forward with the notice of proposed rulemaking to safely return the 737 to service. Both are important milestones in the certification process as we collectively focus on ensuring transparency at all stages.

We are working now on completing the remaining key tasks, coordinating with and following the lead of our global regulators. As you would expect the pandemic has required some changes to how we do things, including working remotely and virtual meetings with our regulators.

For activities that cannot be completed remotely, we're making appropriate and safe arrangements to enable effective cross-border collaboration with the global regulators, but the overall environment presents real logistical challenges for the necessary international travel and the in-person meetings which are required and that we are working through.

Based on our latest assessment, we now expect the necessary regulatory approvals will be obtained in time to support resumption of deliveries during the fourth quarter. Of course, the actual timing will ultimately be determined by the global regulators.

After an approximately four months suspension of production operations, in May, we resumed early stages of our 737 production line. During the suspension, we implemented more than a dozen initiatives focused on workplace safety, product quality and they have strength in the production system and helped optimize the build environment allowing for more predictability and stability for future rate increases.

In addition to the 737, we're focused on meeting our commitments to our commercial, defense and space customers. In fact, within defense, we delivered 44 aircraft in the quarter, completed the critical design review for T-7A advanced trainer and achieved our first flight of both the F-15 Qatar Advanced and the F-18 Block 3 Super Hornet for the US Navy.

Now let's turn to the next slide to discuss the business environment for our industry. At Defense, Space & Security, we continue to see a healthy market with solid demand for our major platforms and programs, both domestically and internationally. Our portfolio of programs and technologies remains well aligned to our customers' missions.

We are also well-positioned with proven world-class platforms to address current needs and innovative, capable and affordable new franchise programs for the future. The $7 billion of orders that BDS booked in the quarter and some recent awards including the historic contract for the F-15EX from the US Air Force, combined with the contract extension from NASA to support the International Space Station underscore the strength of our offerings.

The demand outlook for our Government Services business remained stable. The strength of Government Services provides a strong foundation for our overall Services business. We see growth in a number of government services areas including ramp-ups to support international customers with training, logistics and supply chain offerings as well as growth on key US programs. Our Government Services, Defense and Space programs continues to provide critical stability for us as we move forward.

On the commercial side, our industry and our company are weathering challenges like none we have ever experienced in our lifetimes, and many of those challenges are still unfolding. IATA projects passenger traffic will drop by more than half this year compared to 2019, as global economic activity slows down due to COVID and governments severely restrict travel to contain the spread of the virus.

After a short 94% drop in passenger traffic in April, we've seen tangible signs of recoveries in key markets such as China and Europe with operations increasing into July. The US has also improved from the April lowest point. However, the recent uptick in COVID cases has slowed its recovery. So while we were encouraged by the early signs of recovery, the past few weeks demonstrate the trajectory may be uneven.

On the cargo side, the reduction of belly cargo capacity has led operators to utilize essentially all available freighters. Significant use of passenger aircraft as freighters continue, though yields are starting to return to normal as more belly cargo capacity comes back online. We've also seen improvement in global fleet utilization. Around 65% of the fleet is now back in service with hundreds of aircraft reactivated weekly. Utilization metrics are improving as airlines resume more of their network and schedules.

June, passenger operations reached approximately 30% of last year's levels, with acceleration in July, bringing them to nearly 50% at last year's level. Passenger load factor has improved from the April levels but remains low. In June, the load factor was 58% versus 84% a year ago.

As I alluded to earlier, we're seeing different paces of recovery for different regions. Some countries reopen their air travel improved along with it. This is the case in Europe, with many airlines resuming operations as borders open. The US recovery has sustained weekly 20% traffic growth momentum until about July 4, and since then with rising cases in key leisure markets, we've seen signs of flattening or slight declines as the airlines have noted.

Continued growth in cases and corresponding travel restrictions or quarantine policies may dampen the near-term recovery. The way forward will depend on the development with respect to the pandemic and the scope of government travel restrictions. We continue to see volatility on the recovery path ahead.

Given the amount of uncertainty that is still in front of us, managing liquidity continues to be vital to our industry's ability to bridge to recovery and to navigate the challenges. As we previously discussed, we continue to believe that the fundamentals that have driven air travel for the past five decades and double the air traffic over the past two decades remain intact.

And we believe this industry will in fact recover, but we currently estimate it will take around three years for travel to return to 2019 levels. And it will be a few years beyond that for the industry to return to long-term growth trends.

The picture is obviously dynamic and subject to many unknowns. As we see it today, narrow-body airplanes will lead the way to recovery as airlines bringing their networks back online focusing first on domestic routes. Meanwhile border closures and travel restrictions significantly dampen international travel demand, which in turn impacts the utilization of wide-body passenger fleets in the near-term. A key driver in both segments will be the rate of retirements of older fleets.

We expect our customers to look at their fleet planning strategies differently in light of these dynamics. More than 2,500 aircraft with 20 plus years of service were in active service prior to the crisis. So far, we have tracked retirements of close to 1,000 of these aircraft across the global fleet. Replacements will not be uniform, as airlines will focus on the oldest and least efficient airplanes to retire.

Some airlines have already made announcements to this effect. Thousands of more fuel-efficient airplanes that we and our competitors have in backlog will make future flying even more environmentally sustainable and help us reach our industry's emission reduction targets. Airplanes that we plan to deliver this year will be 25% to 40% more fuel-efficient than the airplanes they're replacing.

The urgency and value of fleet versatility is accelerated by this crisis. And our position is helped by the value proposition of our family of airplanes and the diversity of our backlog. This includes our market-leading 787, our unmatched cargo line up, the world's largest and most efficient twin-engine jet the 777X, and of course, the versatile 737 family.

On the Services side, we are seeing a direct impact on our Commercial Supply Chain business as fewer flights result in the decreased demand for our parts and logistics offerings. Our commercial customers are curtailing discretionary spend such as modifications and upgrades, and focusing on required maintenance only.

We anticipate accelerated retirement of older aircraft, which will result in a newer fleet when air travel resumes to previous levels. This will prolong the period of decreased demand for our commercial services offerings. Similar to commercial airplanes, we expect a multi-year recovery period for the Commercial Services business.

You'll see the significant impact of COVID is reflected in our Commercial Services financial results this quarter, which Greg will go through a little bit later. We closely monitor the Commercial marketplace by staying very engaged with our customers all around the world to fully understand short and long-term requirements.

We regularly incorporate additional insight to inform current and future production rates. Based on our latest assessment, we have decided to refine our commercial airplane production rates to better calibrate near to medium-term supply and demand balance.

Let's turn to slide 4. In the narrow-body segment, we expect to continue to produce the 737 at low rates for the remainder of 2020, and gradually increase the rate to 31 by the beginning of 2022, with further gradual increases that correspond with market demand. The production ramp profile is also affected by the pace of delivery of our stored aircraft. We have moderated, the production rate ramp-up from our prior assumption to reflect commercial airline industry uncertainty due to the impact of COVID.

We continue to see our 737 family of airplanes creating capacity for growth and providing required replacements for older, less efficient airplanes. We have and will continue to work closely with our customers review their fleet plans and make adjustments where appropriate to adapt to lower-than-planned 737 production in the near-term, provide more flexibility to deliver our backlog and protect the value of the 737 family.

Moving to the wide-body segment, we previously planned to reduce the 787 production rate to 10 per month in 2020 and gradually reduce to 7 per month by 2022. In light of the ongoing challenges presented by the pandemic and the impact on our airline customers, we now plan to reduce the 787 production rate from the current 10 per month to 6 per month in 2021 to further de-risk our skyline, taking into account the financial condition of our customers and the geopolitical environment.

Given the lower rate profile, we will prudently evaluate the most efficient way to produce the 787 to include studying the feasibility of consolidating our 787 production into one location. We will continue to evaluate the rate beyond 2021 to balance supply and demand. Our 787 family has a compelling value proposition, offering unparalleled fuel efficiency and range flexibility, enabling carriers to optimize fleet and network performance as well as profitably expanding into new markets.

Turning to the 777X. We continue to execute the flight-testing phase of our rigorous test program. As we look toward entry into service, we've adjusted the timing of the first 777-9 deliveries in 2022 versus our prior forecast of

2021. This reflects our assessment of the development and test timeline, feedback from our customers and projected impacts from COVID-19.

We are also incorporating lessons learned from the 737 certification process. We will continue to manage the risks inherent in any development program. We continue to expect to deliver 777s at an average rate of approximately 2.5 per month in 2020. We will take a measured approach to the 777X rate ramp as we look to minimize the amount of change incorporation work by managing the number of the aircraft produced prior to entry into service.

Due to market uncertainties driven primarily by the impacts of COVID-19 and moving the 777X delivery to 2022, we now plan to reduce the combined 777-777X production rate to 2 per month in 2021 versus our previous plan of 3 per month in 2021.

Finally, we'll make no change to the 767 and 747 production rates at this time. These programs are targeted for the cargo market and approximately half of the 767 production is dedicated for the tanker program. On the 747, we will continue building 747s at the current rate, as we deliver on our commitments to key customers.

In light of the current market dynamics and the outlook, we anticipate completing production of the iconic 737 in 2022. Our commitment to our customers does not end at delivery. These airplanes will be flying for decades to come, and we'll continue to support the 747 franchise, its operations and sustainment well into the future.

These rate decisions are based on our current assessment of the demand environment. Taking into account a host of risks and opportunities, we will closely monitor the key factors that affect our skyline, including the wide-body replacement cycle and the cargo market. We will maintain a disciplined rate management process and maintain - and make adjustments as appropriate into the future.

As I mentioned last quarter, the sharp reductions in demand for our airplanes and services that we see over the next several years won't support the size of the workforce that we had prior to the start of the pandemic.

As previously announced, we started implementing a reduction of our global staffing by approximately 10% by end of this year, from where we ended the year last year, through the combination of voluntary layoffs, attrition and where necessary involuntary layoffs. These are difficult actions, we're taking along with infrastructure and spending reductions to better position us for the future. We're taking a thoughtful and - the thoughtful approach carefully managing required skills and talent.

In some areas and most notably defense, we continue hiring to meet our customer commitments and to fill critical skill positions. We are implementing these reductions as fairly, respectively and transparently as possible and providing as much support for our employees as we can through the duration of the global health emergency that we're facing.

Unfortunately, the prolonged impact of COVID-19, the further reductions in our production rates, and the lower demand for commercial services means we'll have to further assess the size of our workforce and ensure we're aligning with the smaller market.

More of hard decisions are likely ahead of us, as we try to limit the impact on our people as much as we possibly can. We will be communicating with our team-mates openly, honestly and transparently. The assessment will be aligned with our ongoing efforts to simplify and improve, how we do our work, driving agility and positioning us for when the industry recovers.

In summary, our industry is changing, our customers' needs are shifting and we're adapting. We believe over the next several years air travel demand will gradually recover to the growth trends. Protecting long-term flexibility while adjusting capacity in the interim, to balance near to medium-term supply and the demand will be critical to preserve our long-term prospects.

There is no question that this is a historically dynamic and challenging time for our industry. We'll work closely and transparently with our customers, our suppliers and our employees as we navigate through and rebuild stronger on the other side. We will take decisive action to transform the business, focused investments, preserve liquidity, streamline and size our operations to become a better more sustainable Boeing,

And with that, let me turn it over to Greg for an update on our financial performance. Greg?

Greg Smith

Great. Thanks Dave, and good morning, everyone.

Let's turn to Slide 5 for our second-quarter results. Our financial results continue to be significantly impacted by COVID and the 737 MAX grounding. Second-quarter revenue of $11.8 billion, reflects lower Commercial Airplane deliveries and Commercial Service volume and an additional 737 MAX customer consideration charge of $551 million in the quarter.

Earnings in the quarter were also impacted by over $2 billion of charges comprised of the BCA abnormal costs, BGS charges as a result of the COVID-19 market environment and severance costs for approximately

19,000 employees leaving the company, of which around 6,000 have left as of June 30.

These reductions combined with additional hiring that continues in key areas like BDS and critical skill areas will result in approximately 10% net workforce reduction this year. These charges were partially offset by income tax benefit related to the NOL carry-back provision in the CARES Act, as well as the impact of pre-tax losses. I'll cover these charges in more detail on the subsequent slides.

Let's now move to Commercial Airplanes on Slide 6. Revenue was $1.6 billion, reflecting lower Commercial Airplane deliveries due to the significant impact of COVID-19 pandemic on our customers and on our operations, including the shutdown of our commercial airplane production for several weeks in April and May.

Also impacting revenue in the quarter was the $551 million increase in estimated 737 MAX customer considerations. This is compared to a $5.6 billion charge we booked in the second quarter of last year to establish the customer consideration liability.

BCA second-quarter operating margins declined due to the following: lower delivery volume, $712 million of abnormal production costs related to the 737 MAX program, $468 million of severance expense and $131 million of abnormal production costs for the temporary suspension of our Puget Sound and Charleston production sites due to COVID-19 through again the April and early May time frame.

Similar to a prior period in preparation for our second-quarter financial statements, we made certain assumptions on the 737 MAX including delivery and production rate ramp-up profiles. As Dave mentioned, we've moderated the production rate ramp-up from our prior assumption to reflect detailed ongoing discussions with our customers as they assess the environment and their fleet requirements.

We've also revised our assumptions on timing and the profile deliveries from storage. Delivery from storage will continue to be priority-one after assisting our customers with their return to service. We currently have approximately 450 737 MAX aircraft built and stored in inventory. We expect to continue to produce the 737 at very low rates for the remainder of 2020, and gradually increase the rate 31 by the end of 2002 and expect further gradual rate increases to correspond with market demand.

We've assumed that the timing of regulatory approvals will enable the 737 MAX deliveries to resume during the fourth quarter of 2020. We have also assumed that the majority of the 737 MAX aircraft in storage will be delivered during the first year after resumption of deliveries. There is no material change in our estimate total abnormally costs of $5 billion. We expect these costs will be expensed and incurred over this year and the next year.

During the second quarter, we expensed $712 million of abnormal production costs, which brought the cumulative abnormal cost expense to-date to $1.5 billion. As reflected in the second-quarter revenue, we've updated our assessment of the liability for estimated potential concessions and other considerations to customers for disruptions related to the 737 MAX grounding and associated delivery delays.

This reassessment up - includes updated estimates to reflect revisions to return to service, delivery and production rate assumptions driven by timing of regulatory approvals, as well as latest information based on engagement with our customers.

Cumulatively, we've accrued a $9.6 billion liability for the estimated potential concessions and other considerations. To-date, we've made $2.6 billion of payments to customers in cash and other forms of compensation, including $600 million we paid this quarter. We have settlement agreements covering approximately $3 billion of the remaining liability balance of $6.7 billion.

We continue to address the impact individually customer-by-customer, including assessing the effects of MAX disruption is having on their operations in light of the COVID pandemic. 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-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 4,500 aircraft valued at $326 billion. The decline in backlog in the second quarter reflected aircraft order cancellations and removal of aircraft orders from our backlog, due to ASC 606 accounting standard.

The ASC 606 imposes additional criteria for recognizing an aircraft order in Boeing's backlog, even though the customers continue to have binding contracts with our company we have - when an order is deemed to not meet the criteria that we adjust the backlog accordingly. The ASC 606 adjustment removes aircraft in backlog if the customer has a contractual right to cancel and incorporates our assessment of a customer's liquidity position and commitment to take the delivery.

As Dave mentioned earlier, we are taking action to adjust our production rates and our infrastructure to adapt to the COVID-19 pandemic impact on aircraft demand. These rate decisions are based on our current assessment of our demand environment, and we will continue to closely monitor these factors that affect our skyline and make rate adjustments as appropriate in the future.

We strive to adjust our production rates as timely as possible. In some cases, we would have liked to bring production rate down sooner to match near-term demand. However, there is a number of key factors that need to take into consideration, including orderly supply chain transition and production system stability. Therefore, we expect production to continue to outpace delivery rate in the near-term, resulting in higher finished goods inventory.

Let's now move to Defense, Space & Security on Slide 7. Second-quarter revenue was stable at $6.6 billion, reflecting COVID-19 impact on derivative aircraft programs, partially offset by higher volume across the remainder of the portfolio.

Second quarter operating margin decreased to 9.1% largely due to $151 million, KC-46A Tanker charge primarily driven by additional fixed cost allocation resulting from lower Commercial Airplane production volume due to COVID-19. BDS operating margin in the second quarter of 2019 benefited from a gain on the sale of property. During the quarter BDS won key contract awards worth $7 billion and our backlog stands at $64 billion with 31% from outside of the United States.

Let's now turn to Global - Boeing Global Services results on Slide 8. In the second quarter, Global Services revenue declined to $3.5 billion due to lower Commercial Services volume due to COVID-19 partially offset by higher Government Services volume. Operating margin in the quarter reflected lower Commercial Service volume, less favorable mix of products and services and a $923 million of an earnings charge.

The charges are due to significant impacts COVID has had on our customers' liquidity, and demand for certain products as customers' fleet plans adapt to sharp reductions in air travel. The charges include the following reserve for higher expected credit losses primarily due to customer liquidity issues, inventory write-downs and impairments of distribution rights, primarily driven by airlines' decision to retire certain aircraft, and contract termination and facilities impairment charges and finally severance costs.

BGS backlog declined to $18 billion, primarily due to the reduction for commercial orders that in our assessment no longer meet the accounting requirements of ASC 606 for inclusion in our backlog. Our remaining backlog is primarily made up of government contracts, which continue to be stable.

To respond to the challenging market dynamics, we have taken significant action and proactive steps to right-size and ultimately better position our Services business for these new market realities. These include employment actions as well as proactively taking steps to right-size our inventory, and tailor our portfolio to ensure that we are positioned to serve our customers both through this challenging time and when the industry begins to recover.

Let's now turn to cash flow on Slide 9. The historic market downturn caused by the impact of COVID-19 our airlines and the global economy continues to put significant pressure on our cash receipts. Operating cash flow for the second quarter was negative $5.3 billion driven by lower commercial airplane delivery volume, advanced payment timing, commercial service volume and as discussed COVID-19 caused delivery and production disruption in the quarter.

In the quarter, we also saw increased cash receipts from the release of with withholds on tanker deliveries and the Department of Defense initiative to increase progress payment rate. We appreciate the Pentagon's leadership in supporting the National Security Industry base and we continue to do our part to keeping cash flow to our supply chain. We continue to expect cash flow generation on the government side of the business to be solid and in line with earnings.

Clearly, the additional reductions in our commercial production rates as well as the updated 777X schedule have made our cash profile even more challenging. However, based on what we know today and our actions, we still see a path to positive cash flow in 2021. We'll continue to work opportunities diligently and monitor risk factors given the dynamic nature of the current environment.

Let's move now to Slide 10 and we'll discuss our liquidity position. As discussed last quarter, due to the significant impact COVID-19 on our operating cash, we've been proactively managing our cash position and assessing additional liquidity. In May, we completed a $25 billion bond issuance and the strong investor response on the bond validates the confidence we have in our future.

Also in the quarter, we paid down $2.4 billion of commercial paper, bringing our total debt to $61.4 billion. We appreciate the administration, Congress, the Federal Reserve and the Treasury Departments for their swift actions in stabilizing the market at the onset of this crisis, which helped the credit markets function again and pave the way for our successful bond offering.

We ended the second quarter with $32.4 billion of cash and marketable securities. We also continue to have access to our $9.6 billion revolving credit facility, which to-date has not been drawn upon. We expect our current - we expect our use of cash due to COVID-19 to continue for the remainder of the year and into part of '21.

Given the dynamic environment, we continue to carefully monitor our cash flow position and perform scenario planning to understand the range of outcome and assess what future actions we may need to take to ensure that we continue to have sufficient liquidity. Managing our liquidity and balance sheet leverage are top priorities as we navigate this challenging environment. Reduce our debt levels once cash flow generation returns to normal levels will continue to be a top priority.

Let's now turn to Slide 11. Clearly, COVID-19 pandemic is continuing to present significant challenges for our industry and for our company. We're managing these challenges daily and taking swift action to bridge to recovery and emerge stronger on the other side. To bolster our near-term liquidity, we've taken a number of actions since early this year.

We suspended our dividend and terminated our prior share repurchase authorization. We proactively drawn down on our $13.8 billion term loan in mid-March and raise $25 billion of new debt, cut discretionary spending and reduced or deferred R&D and capital expenditures.

As discussed, to align to the new commercial aerospace realities, we are also lowering commercial production rates and taking difficult workforce actions. As we look to the future, we're focused not just on adapting and recovering but on emerging stronger and more resilient for the long-term.

That includes prudently and proactively reviewing every aspect of our company to identify opportunities to improve performance on our - and our focus on safety, position for new market realities and ensure we're sharper, and leaner and more competitive for the long-term. This is a true business transformation effort and addressing holistically five key areas. We are reassessing all aspects of our infrastructure, facilities, sites and enterprise footprint in light of the reduced demand and also taking into account new remote working opportunities.

We're looking critically at our organizational cost structure and how we operate. We're re-evaluating our portfolio and investments to ensure we're focused in our spend on where we see market opportunities and areas more critical to our future, like safety, quality and innovation. We're managing our supply chain stability carefully while calibrating to lower demand, and we're driving operational excellence into every corner of our company, so we can improve performance, enhance quality, workplace safety and reduce rework.

As we transform our enterprise across these five pillars, we will continuously assess the size of our workforce to ensure we're adapting to market realities, while limiting the impact on our people as much as possible. The goal is to improve cash flow profile, restore our balance sheet strength as quickly as possible and these actions will help get us there.

The financial objectives we've established are measured in billions of dollars and will be executed over a multi-year period. Again this effort is about ensuring we're well-positioned for the future. Even as we reduce our spend, we will continue investing in areas critical to our future, including safety, quality, operational excellence and innovation in key technologies and products.

We're also working with our supply chain partners to carefully manage liquidity and do all we can to maintain stability through this demand shock, so that we can protect the long-term health of the US aerospace industry. Again approximately $0.70 on every dollar we spend goes to the supply chain and we are focused on the best ways to keep liquidity flowing through our business and to our supply chain through this period.

We are also staying and fully engaged with our customers, assessing the challenging environment to ensure we are right-minded about near-term and long-term demand so that we can always be prepared to meet our customers' needs.

We work hard to de-risk the past decade by addressing a number of different areas including pension funding risk, labor stability, product development, sequencing and raising the bar on productivity, safety cash management discipline. Our teams know how to do this and I'm confident that we're taking the right actions to ensure long-term sustainable future.

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

David Calhoun

Thanks Greg.

We're definitely in an unprecedented period and a tough moment for the industry and the world. Every day I'm inspired by the resilience and the hard work of our Boeing associates, our customers and our business partners. We are and we will continue taking the right actions to navigate through this together, while maintaining focus on our priorities, living our values and driving safety, quality, operational excellence in everything we do.

We're focused not just on adopting and recovering but on emerging stronger and more resilient than ever before. We believe that long-term industry fundamentals remain strong and air travel will recover. Our portfolio of products and technology is well-positioned for that recovery. Much hard work remains ahead of us, but what I've seen the Boeing team do gives me great confidence that we will adapt, we will lead and we will thrive as our industry recovers.

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

Question-and-Answer Session

Operator

[Operator Instructions] Our first question will come from the line of Myles Walton with UBS. Your line is open. Myles Walton with UBS, your line is open.

And our next question comes from the line of Hunter Keay with Wolfe Research. Your line is open. Please go ahead.

Hunter Keay

Can you please give us some color on that path to positive free cash flow in 2021 kind of curious to know? Obviously, know your assumptions on rate, but beyond that, what are the primary drivers you need to achieve it? Thank you.

Greg Smith

Yes, yes, absolutely. Well look, I'd say, first and foremost 737 return to service and driving the production and then the delivery ramp as we deliver those aircraft out of inventory that is the primary driver. Outside of that 777X getting closer to EIS and the financials associated with that. The 737 - 787 I'm sorry, cash profile does improve due to inventory unwind, and really that the deliveries are outpacing production.

So we'll see the benefit of that. And then just continue to take actions on liquidity and rightsizing the company and productivity. But essentially, those are really the four biggest buckets to get you to 2021, but the single biggest driver being the 737 MAX profile.

Operator

And next question comes from the line of Carter Copeland with Melius Research. Your line is open, please go ahead.

Carter Copeland

Just a quick clarification and question. Greg, because of the rate changes did you have material program margin revisions downward on the 787 and the 737 and how comfortable are you about for loss - staying away from a for loss in the 787? And then just on the 606 revisions, and what you're seeing there? Can you give us a better sense of the backlog change and how much of that is related to the liquidity assessments you outlined and some of these planes returnable at this point?

Greg Smith

Yes, yes let me start with on the margin front. Yes, we obviously we had adjustments on margins, program margins across the board, with the rate reductions and the revised delivery profile. Look, when you step back and look at 787 in particular at these lower rates and look at it on a unit basis. The margins obviously, don't increase, the way we had in prior with the higher rates.

But they maintain to be pretty strong on a unit basis, and I would say that continues to be the fundamentals we've talked about, again, even with the lower rate, the improvement of mix and the step down by block. So - and then of course, the continued productivity. And as Dave mentioned, we're initiating the study on multiple sites. So more to come on that, but we'll continue to work.

Obviously, all areas of productivity on the program and particularly with these lower rates. But again on a cash basis, on a unit basis, margins are actually hanging in there pretty well, even at these low rates. And that's really, I think a credit to the lot of work that's behind us that got done to get the program more efficient. And so, we're certainly seeing the benefits of that even at these low rates.

On the 606 in the second quarter, so I think if you look at it, there was about 480 odd cancellations that were noted. About 300 of those were associated with 606. So there is a disciplined process that is outlined that we go through every quarter and assess the entire backlog by customer that the team goes through and makes that assessment. And we do that, like I said, every quarter and we'll continue to do that.

And I suspect with time, at least in the near-term, we will have more adjustments on - related to 606. But again, that doesn't mean that they may not take the airplane over time. It just has to get through that criteria even though there's contracts in place, but again there are steps that we take and a thorough assessment and we adjust the backlog accordingly at that time, but it could change quarter-over-quarter. Some folks could move into the 606 and move out of it, but again we'll true it up every quarter.

Operator

And our next question will come from the line of Myles Walton with UBS. Your line is open. Please go ahead.

Myles Walton

Greg in the second half of 2020 should we expect the cash flow burn to be materially improved from the first half or is that excess inventory build, is going to be a continued headwind? And then just considering everything else you obviously solved the liquidity problem with the debt offering. But do you think about accelerating the balancing of the capital structure here to ensuring investment-grade ratings?

Greg Smith

Yes, I think if you look at the second half, right now Myles, it's a little bit better. That's at least what we got in the forecast. As you can imagine it's dynamic, and will remain dynamic through the balance of the year. But as we look at it right now in our latest forecast, we see it being slightly better and - we'll continue to be burning cash into early 2021. And like I said, as with the production rates that we laid out and the assumptions we made around those in our actions that will take, we can see a path to positive cash flow in 2021.

And we'll continue to keep you up-to-date on that, but you should continue to expect to see negative cash flow through the balance of the year and into early 2021. On the liquidity front, I think, again, getting the $25 billion was critical and I think the fact that the market has got opened up and allowed us to get in there at the right time. And as you know, we were well oversubscribed, which I think just goes to the confidence that the market has in the long-term fundamentals of the marketplace.

We don't see a need to raise any additional capital at this time. And - but we'll continue to monitor it and keep all of our options open. But as I said in my opening remarks on deployment, if we see opportunities to pay down that debt sooner or restructure that in any way, we will absolutely be doing that and we will be laser-focused on bringing that debt down and getting the balance sheet back in order.

Operator

And our next question will come from the line of Seth Seifman with JPMorgan. Your line is open.

Seth Seifman

Greg, I wonder if you could give us a little more color on the 737. I mean, the change in the rate from a kind of 31 by the end of 2021 to beginning of 2022 sounds like - seems like a fairly small change. It seems like your suppliers are experiencing something a little bit bigger? And so maybe what does that say about the cadence of that ramp during 2021 and how much risk is there still around that number?

And maybe finally what opportunities are there may be for you to make more deals with some of your top customers to get more planes out of inventory and allow you to raise that rate?

Greg Smith

Yes well, look I mean, like Dave mentioned and I think I echoed, the rate profile that we put in, and the delivery profile is really based on detailed discussions with each of our customers. That certainly has better clarity this quarter than they did last quarter, so we adjusted that accordingly. But we're in discussions with them daily and we'll continue to do that and make adjustments. When you look at the supply chain, as you know Seth, everybody is in a different state.

I'll say inventory and rate based on where they were before the pandemic, in particular where we had suppliers that were not - did not have appropriate inventory levels or weren't making our master schedule. So some of those have been accelerated so, I would just tell you that each one of them is that a bit of a different place depending on how much built inventory they have, so you're going to see variation supplier-by-supplier.

And we're, again, staying really engage with them daily on our plans and assumptions, and then helping them as they manage through their inventory or their ramp-up. But you're not going to see, I'll say, everybody is going to have a similar profile to what we have really due to the, like I said, the fact that everybody is sitting at a little bit different inventory level.

And, of course, we're going to, as we said, priority one for us help our customers get the fleet back up, and then it's clearing the ramp, delivering the inventoried aircraft that are, as you know, built and ready to go all that taking into consideration, again, and informing the production rates that will happen in conjunction, but really predominantly follow after we deliver off the ramp.

So lots of lots of moving pieces in there, but I think the most important thing is we got to stay engaged with the supplier and really get them clear line of sight and help them manage through the transition period as we get return to service and get the airplane back in the air.

Operator

And our next question comes from the line of Noah Poponak with Goldman Sachs. Your line is open.

Noah Poponak

Greg, maybe just following up on those fluid conversations with your customers, I mean it's a very dynamic situation, obviously, but you guys have talked about having spoken to every customer and you've identified the categories of customers that would want to take deliveries right now. I mean there was an airline this morning actually talking about accelerating because it's an opportunity to counter-cyclically invest. So I mean I guess how close are we to the whole ecosystem of you, the supply chain, your customers being on the same page? What inning are you in of revision until we feel like we aren't going to get production rate cuts anymore moving forward?

Greg Smith

Yes. Well, look, I think we're on the same page. However, like we said it's dynamic, especially in the near-term. So it's really important that you know our engagements happen frequently, we have a clear line of sight and understanding. So then we can make appropriate changes to delivery profiles, rates, and then in the supply chain. So what we laid out today is our best estimate based on all that input and feedback from customers.

Again, in and around the globe and then managing the risk within our factories, combined with the supply chain. As both Dave and I have articulated several times, we've spent a lot of time and effort stabilizing the 737 production facility and enhancing it.

And with a keen eye towards as we move up and move back into higher production rates it's going to be very smooth and methodical and we're going to certainly have the advantage of all the hard work we put in place to drive stability and not have traveled work and just ensure that, again, we have a smooth rate ramp-up that combined with informed customers - being informed by our customers. So all of that has been taken into consideration on the profile that we just laid out. And obviously, if we see that changing, we'll adjust accordingly.

I think the one moving pieces in there, Noah, that certainly does have flexibility is delivery off the ramp. Those aircraft are finished, they're ready to go. We've got flexibility and the team actually has done some great work getting ahead of that and essentially modeling out and really practicing how we're going to deliver those aircraft and recognizing there is going to be some movement from tail to tail and customer to customer.

So we've got that flexibility it out there that I suspect that we'll have to utilize as we deliver those finished planes. That will, in turn, inform the production rate ramp-up. So we'll continue to kind of keep both of those in mind in. And like I said, one will inform the other and we'll continue to stay engaged with the customers.

Noah Poponak

Just as a quick follow-up to that, the discussion around 2021 free cash flow, it looked like you're going to have MAX inventory unwind, and then airplanes you're producing but not delivering this year also unwind next year, and those could be pretty sizable numbers were even if their aircraft business otherwise was just breakeven plus defense, plus services, you'd actually maybe have nicely positive cash flow. Is the missing piece there just - it sounds like from your earlier comments you might plan to be producing ahead of deliveries the rest of this year and then even into the beginning of next year?

Greg Smith

Yes, I think that's definitely - that is going to be the case and, on the MAX, again, customer by customer, it varies. So it's not kind of a one size fits all when it comes to cash and the delivery profile of those airplanes that are going to come off the ramp. So, again, lots of moving pieces in there, but as we kind of pull it all together, just again, based on what we see today, we can see that path to positive cash flow.

And like I said it - we'll continue to keep you up-to-date on that, but I think we've got between the rates in our game plan around how we're going to execute between now and then I think we have a good line of sight on that right now.

David Calhoun

Greg, if I might just add something, since I've been part of most of these calls with our customers, I want to acknowledge what you said is actually a fact. We do have many calls that are on the forward-looking I want to take a big position kind of discussion. And then we have the others, of course, who are in the opposite.

So that's a true story. I think from Boeing's vantage point and our posture at the moment, we're still trying to de-risk the skyline. That has been our motive. And to emphasize to everyone including our own people that we're going to move the finished goods first. That is going to be - that's our intent. If we can move it faster, great. We're still going to hold our production rates as conservative as we can, so that we can get that inventory on the move.

And then when I think this virus, ever looks like it's in the rearview mirror, I think all those discussions that, of course, we do have about the forward upside point of view, I think they'll come faster rather than slower. And I'm - honestly, I think as much about the recovery and the pace up as I do sort of retrenchment and to deal with today's liquidity because I think actually that ramp-up is going to be the more important part of this puzzle going forward.

Operator

And our next question comes from the line of Sheila Kahyaoglu with Jefferies. Your line is open.

Sheila Kahyaoglu

I wanted to ask about normalized margins in BCA in 2022 at these lower rates. Based on these rates you'll produce about 510 aircraft in 2022. The last time you were around those levels was 2011. Your commercial margins back then were closer to 10% and granted that included some service and free cash flow if we adjust for 787 was around $10 billion. So I guess I'm asking how do we think about normalized margins and free cash flow sometime in 2022?

Greg Smith

Well Sheila, as I said, right now it's the pass to that point, right? And so the focus that we talked about around rightsizing the company and taking the actions are going to - they're going to feed right into that. When you look at kind of unit margin over that period by program, again, as I mentioned on one of the prior questions, we're certainly under more pressure because of the lower production rates.

But as we ramp-up, and particularly on the MAX we'll see that gross margin on a unit basis come up. And then again, we'll just have to continue to manage our spend on all of our discretionary but the actions that Dave - and I'll let Dave comment here, but the actions that we're putting in place now are really focused out in that time frame to make sure we come out of this stronger, and healthier and positioned to compete and get us through this window, this period we're all faced with the pandemic and really just not leave a rock unturned as far as our cost structures in our inter-site consolidations and so on, to ensure that we preserve cash flow out in that period and then, therefore, margin. But I'll let Dave comment as well.

David Calhoun

Well, I'm not sure there is much I can add to that. We're going to have these volume impacts on our program accounting et cetera, over this near-term unit margins, cash margins is our focus. We feel good about where they are.

We think we can make them better, and then as volume and orders come along and we can begin to look out further. I think everything gets - not only gets back to where it was, but maybe gets better. So not much I can add to sort of the dynamics of next year's margins other than to tell you our focus is on unit cash margins and just continue to manage that as closely as we can for liquidity purposes. And then as order books fill out, we can - you'll see that impact in the accounting side of the puzzle.

Operator

And our next question comes from the line of Doug Harned with Bernstein. Your line is open.

Doug Harned

Greg, you were talking about the flexibility and basically with the airplanes roughly 450 MAXs that you have parked, but given a lot of the pressures that you had from customers for deferrals and cancellations. As we look at this, it probably does mean that a large number of those airplanes will go to different customers than were originally planned. So operationally, how do you go about re-configuration of these airplanes?

Particularly, you've got a supply chain that would be involved here that sort of - it's in a very difficult situation. And have you assumed costs associated with re-configuration and re-marketing of these airplanes in the BCA provisions you've taken so far?

Greg Smith

Yes, the short answer is, yes. We have Doug. So we've assessed all 450 and put a risk assessment against all of those aircraft. And then took a provision for that we believe we will have to either re-market or re-configure some of those aircraft. And that's something obviously, that we'll continue to monitor and update on. But we've assumed that that will take place with some of those aircraft, just again, by the discussions we've been having with our customers.

Doug Harned

But just physically this could be - I mean this is different than anything that I've ever seen you had to deal with in the past in terms of scale. I mean operationally how do you think about doing that?

Greg Smith

Yes well, the team - like I said, we're trying to stay ahead of these things, so anticipating this as a possibility, quite frankly some time ago. The team has gone through and got clear understanding about how would you go about doing this systematically, where would we do it, how much configuration would take place. Obviously, with the MAX as you know, it's fairly limited.

You're not dealing with the wide-body so impact on the supply chain, quite frankly I don't really see it much. It's going to be more basic re-configuration and, in some cases, possibly customers take them configured as is and they reconfigure them. So I think, you're going to see a variety in how this plays out. But again, we're anticipating, we're going to do some of it and we're trying to get ahead of it. And I think getting those plans in place today, and if it's better than that great. If it isn't, we'll be ready and facilitized to be able to do it.

Operator

And our next question comes from the line of Robert Stallard with Vertical Research. Your line is open.

Robert Stallard

Greg, I was wondering if you could give us some more clarity on what's in your plan with regard to these 737 MAX deliveries. You said you expected to deliver most of them in the first year after re-certification or re-entry into service. But could you give us some idea of exactly what that number is and what the sort of cash impact of that would be? Thank you.

Greg Smith

Yes, no like I think we've been consistent to say, hey look, we want to get those airplanes delivered and that's the majority of them in the first year. So there'll be airplanes that are outside that first year, but the majority will take place in the first year. Rob, this is just based on discussions we're having with customers in sequencing those airplanes out. And we'll continue to focus on again, relieving the inventory off the ramp, which then again, that informs the production rate.

So we got to focus there, first and then ramp up production and clear the ramp. So we can complete the airplanes coming out of production. So it moves around certainly, month-to-month quarter-to-quarter, but again, majority will remain in the first year, and then we'll see some of that trailing off over time, just again, based on customer preference.

Robert Stallard

Just a quick follow-up because that would seem to imply a very large number of aircraft deliveries in the next almost 12 months when obviously airline conditions are very weak, are most of these going to replacement is that the best way to look at this?

Greg Smith

Yes, certainly I mean, they've got the fleet plans in place. And so again, what informs it is our discussions with them around quantity, and around timing and sequencing. So it - all of that's informing kind of how we front-load this thing. But look, Robbie, could it move here and there from month-to-month and from quantity of airplane outside this profile. Sure it could, but as we see it today, we see the majority of those, again, informed by the customer.

We certainly have the ability and we're capacitized to deliver them, and as you know they are completed aircraft. So, the cycle time from turn that airplane on and getting into the hands of the customer is pretty short. So we've got that, again that flexibility in our favor here and we'll adapt accordingly based on the needs of the customer.

Maurita Sutedja

Operator, we have time for one more question.

Operator

And our last question will come from the line of Cai von Rumohr with Cowen and Company. Your line is open.

Cai von Rumohr

So a follow-up to Rob's question so, if you're going to ramp to 31 a month going until 2022, you've got to be building close to 200 planes or more in 2021. And if you deliver 400 plus planes the inventory goes down by 200, but you still have 250, 300 of lot of planes. And we're only seeing it makes sense to go to 31 if you felt your skyline called for delivering more 737s in 2022 than in 2021, is that correct?

Greg Smith

Well Cai, I'd say look, the production rate increases, Dave said it, I said it, it's going to be slow and gradual on the production side building up to 31 in that timeframe. In conjunction with that will be the delivery again off the ramp, and that will really inform the production rate, but it's a very gradual slow rate build-up to that 31 and that could adjust based on how we deliver off the ramp or any further information we gather from the customers.

Again, the supply chain, we have the inventory clearly on hand, as you've seen. And so, if we could go up quicker, we certainly assess that, but - and I'll let Dave weigh in here, but stability is going to be job one. It's ensuring that we move up methodically and stabilized, not have travel work, first-time quality. We'll do an assessment then we'll move up to the next rate. And then, again, we'll be informed of how quickly we are clearing the inventory off the ramp. I don't know, Dave, if you had any more to add on the production side.

David Calhoun

Yes, I don't really have anything more to add, other than again, think about our posture in the middle of next year if in fact, things are beginning to return, customers are beginning to see the virus in the rearview mirror, vaccines are being discussed and described. I really believe that the toughest part of our puzzle as I said, going forward is going to be then returning to rates that satisfy what I think will be a reasonably robust return to the market.

So that's part of our math here, but what Greg said holds, for most of the year, next year, the governor on rate is going to be the pace at which we sell that finished goods inventory.

Cai von Rumohr

But as you look today, does it look 2022 you will deliver more than 2021 without getting into the numbers?

Greg Smith

Yes.

David Calhoun

I sure hope so.

Cai von Rumohr

Okay. Thank you.

David Calhoun

That's the plan, Cai.

Cai von Rumohr

Thank you.

Operator

Thank you.