Boeing Forecasts Challenging Near-Term Aerospace Market with Resilience in Long Term

- Near-term industry challenges impact demand for commercial airplanes and services

- Over 10 years, Boeing Market Outlook shows resilient $8.5 trillion total market

CHICAGO, Oct. 6, 2020 /PRNewswire/ -- Boeing [NYSE: BA] today released its annual forecast for the commercial and defense aerospace market, reflecting the impact of the COVID-19 pandemic and Boeing's view of near-, medium- and long-term market dynamics. The 2020 Boeing Market Outlook (BMO) projects that the commercial aviation and services markets will continue to face significant challenges due to the pandemic, while global defense and government services markets remain more stable.

"While this year has been unprecedented in terms of its disruption to our industry, we believe that aerospace and defense will overcome these near-term challenges, return to stability and emerge with strength," said Boeing Chief Strategy Officer Marc Allen.

The BMO forecasts a total market value of $8.5 trillion over the next decade including demand for aerospace products and services. The forecast is down from $8.7 trillion a year ago due to the impact of the COVID-19 pandemic. Airlines globally have begun to recover from a greater than 90% decline in passenger traffic and revenue early this year, but a full recovery will take years, according to the outlook.

The 2020 Boeing Market Outlook includes projected demand for 18,350 commercial airplanes in the next decade – 11% lower than the comparable 2019 forecast – valued at about $2.9 trillion. In the longer term, with key industry drivers expected to remain stable, the commercial fleet is forecasted to return to its growth trend, generating demand for more than 43,000 new airplanes in the 20-year forecast time period.

The BMO also projects a $2.6 trillion market opportunity for defense and space during the next decade. This spending projection reflects the ongoing importance of military aircraft, autonomous systems, satellites, spacecraft and other products to national and international defense. This demand continues to be global in nature with 40 percent of expenditures expected to originate outside of the United States.

While near-term commercial services demand is lower, the BMO forecasts a $3 trillion market opportunity for commercial and government services through 2029, with digital solutions emerging as a critical enabler as customers focus on leaner operations to adjust to future market demand. Life cycle services and support will help customers scale their operations to meet efficiency and cost objectives aligned to market recovery trends.

As the impact of the pandemic continues, Boeing is taking action to reshape its business operations to adapt to the new market reality and become more resilient for the long term. This business transformation includes every element of Boeing's enterprise, including infrastructure, overhead and organization, portfolio and investments, supply chain health and operational excellence.

Also released today, the 2020 Commercial Market Outlook (CMO), an annual 20-year forecast addressing the market for commercial airplanes and services, projects an increase in the share of deliveries replacing older passenger aircraft that are being retired in an accelerated replacement cycle, especially in the first decade.

"Commercial aviation is facing historic challenges this year, significantly affecting near- and medium-term demand for airplanes and services," said Darren Hulst, vice president, Commercial Marketing. "Yet history
has also proven air travel to be resilient time and again. The current disruption will inform airline fleet strategies long into the future, as airlines focus on building versatile fleets, networks and business model innovations that deliver the most capability and greatest efficiency at the lowest risk for sustainable growth."

The commercial forecast includes:

- Over the next 20 years, passenger traffic growth is projected to increase by an average of 4% per year.
- The global commercial fleet is expected to reach 48,400 by 2039, up from 25,900 airplanes today. During this period, Asia will continue to expand its share of the world's fleet, accounting for nearly 40% of the fleet compared to about 30% today.
- Single-aisle airplanes such as the 737 MAX will continue to be the largest market segment, with operators projected to need 32,270 new airplanes in the next 20 years. Single-aisle demand will recover sooner due to its key role in short-haul routes and domestic markets as well as passenger preference for point-to-point service.
- In the widebody market, Boeing forecasts demand for 7,480 new passenger airplanes by 2039. Widebody demand will be affected by a slower recovery in long-haul markets – typical after air-travel shocks – as well as uncertainties from COVID-19's impact on international travel.
- Air cargo demand, a relative bright spot in 2020, is expected to grow 4% annually and generate further demand for 930 new widebody production freighters and 1,500 converted freighters over the forecast period.

<table>
<thead>
<tr>
<th>Airplane demand, 2020-2039</th>
<th>Seats</th>
<th>Total deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional jets</td>
<td>90 and below</td>
<td>2,430</td>
</tr>
<tr>
<td>Single-aisle</td>
<td>90 and above</td>
<td>32,270</td>
</tr>
<tr>
<td>Widebody</td>
<td></td>
<td>7,480</td>
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<tr>
<td>Freighter widebody</td>
<td>-------</td>
<td>930</td>
</tr>
<tr>
<td>Total</td>
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<td>43,110</td>
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The global airplane fleet will continue to generate demand for aviation services, including parts and supply chain; engineering, modifications and maintenance; training and professional services; and digital solutions and analytics. The served market for commercial services is valued at $1.6 trillion, and $1.4 trillion for government services.

"Boeing is focused on making sure that the right services solutions are available to help our customers and industry navigate the downturn and scale their operations accordingly as near-term demand trends upward. For example, low-cost digital solutions can help manage some of the most critical and dynamic aspects of operations, such as crew scheduling," said Eric Strafel, vice president, Boeing Global Services Strategy.

Around the world, the long-term need for commercial pilots, maintenance technicians and cabin crew remains robust. Boeing's 2020 Pilot and Technician Outlook forecasts that the civil aviation industry will need nearly 2.4 million new aviation personnel between now and 2039.

The Commercial Market Outlook is the longest-running jet forecast and is regarded as the most comprehensive analysis of the commercial aviation industry. The CMO and other Boeing market forecasts can be found at [https://www.boeing.com/market](https://www.boeing.com/market).

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