Review of 2020

All sectors of the aerospace industry suffered from the devastating impacts of COVID-19 and while every sector bore those costs, the operational and financial consequences were felt most by U.S. commercial aviation. As an exception, UAS activity and Commercial Space launches *increased* during the year.

U.S. commercial aviation started the year on very strong footing, but in March the virus had crossed the Atlantic and efforts to contain it brought a sharp decline to aviation. TSA checkpoint throughput plummeted from 105 percent of year ago levels in February to 45 percent in March and then just 5 percent in April. Lockdowns, stay-at-home orders, testing and quarantine requirements, border closures and, of course, people's own concerns about being in close proximity to dozens of strangers while travelling, all led to the drop-off in traffic. While leisure traffic showed some signs of life around holidays, business and international traffic was moribund. As revenue collapsed, airlines worked to aggressively cut expenditures but were constrained by competitive factors including a desire to not just survive until the eventual recovery but to have the capacity at that point to meet demand and then return to previous levels of operation. Airlines slashed flights and routes, parked and retired aircraft, entered into sale-leaseback agreements, halted investment spending, sought labor concessions, reduced management compensation and offered voluntary leave and early retirement programs. While the Payroll Support Program (PSP) portion of the Coronavirus Aid, Relief, and Economic Security (CARES) Act forestalled furloughs through September, its expiration led to 37,000 layoffs the following month. According to the Bureau of Transportation Statistics (BTS), airline employment was 86,000 jobs lower than a year earlier, and marked the lowest level of employment dating back to the beginning of BTS records in 1990. Even with the aggressive cost cutting, expenses exceeded revenues during the year, and airlines were forced to incur debt to cover the cash outflow. By September, long-term debt had reached $107 billion, or more than twice its level at the same point in 2019.

As difficult as the year was, there were a few tailwinds. The PSP and two extensions that keep it active through September 2021 are enabling airlines to maintain staffing levels in anticipation of the recovery and direct cash to other expenses. Fuel prices dropped in 2020 to levels well below those of the past 15 years. And the very large U.S. domestic market meant that the leisure segment could travel without fear of shifting foreign entry or quarantine requirements – factors that, combined with outright border closures, depressed most international demand.

As reflected by the TSA throughput figures, demand for air travel in 2020 contracted sharply. In 2020, system traffic as measured by revenue passenger miles (RPMs) contracted 47.3 percent while system enplanements fell 44.2 percent. Domestic RPMs were 43.9 percent lower while enplanements were down 43.1 percent. International RPMs fell 56.0 percent and enplanements by 53.2 percent. The system-wide load factor was 69.5 percent, down 15 percentage points from the 2019 level.

System nominal yields fell in 2020. In domestic markets, all carriers, whether they normally targeted the leisure segment or not, focused on that price-sensitive segment, adding capacity and lowering fares to attract revenue. The result was a 20.7 percent drop in nominal yields. International yield, however, declined just 0.6 percent as demand was generally less price-sensitive.

Not surprisingly, the sharp, unanticipated fall off in demand pushed U.S. airlines into the red. Data for FY 2020 show that the reporting passenger carriers had a combined operating *loss* of $32.1 billion compared to an average profit over the previous five years of $22.1 billion. The network carriers[1] reported combined operating losses of $24.0 billion while the low-cost carriers[2] reported combined operating losses of $6.6 billion as all carriers posted losses.

The general aviation industry experienced a decline of 12.4 percent in deliveries of U.S. manufactured aircraft in 2020, with pistons slightly down by 0.1 percent (in fact, fixed-wing single engine piston aircraft deliveries were up by 3.2 percent) and turbines down by 24.5 percent. With the effect of the pandemic in new deliveries, global billings decreased by 14.8 percent to $20 billion, nearly the same level as they were in 2018 (Statistics for the U.S. billings were not available as of the publication date of this report).

Total operations in 2020 at FAA and contract towers fell by 16.7 percent compared to 2019. This was the first annual decline in activity since 2015. Air carrier activity decreased by 27.5 percent, while air taxi operations decreased by 24.4 percent. General aviation activity fell 8.9 percent and military activity decreased 10.9 percent. Activity at large and medium hubs fell by 29.9 percent and 22.9 percent, respectively, while small and non-hub airport activity declined by 10.9 percent in 2020 compared to the prior year.

[1] Network carriers are: Alaska Airlines, American Airlines, Delta Air Lines, and United Air Lines.

[2] Low cost carriers are: Allegiant Air, Frontier Airlines, JetBlue Airways, Southwest Airlines, Spirit Air Lines, and Sun Country Airlines.