Passenger Airlines, General Aviation, and Air Cargo Traffic

It's no surprise COVID-19 has adversely impacted passenger airlines, given concerns about traveling during the pandemic. Many are hesitant to spend time aboard a commercial aircraft filled with other passengers.¹

Back in April, passenger volumes were less than 5 percent of what they were in 2019.² Although the situation improved over the summer, the number of domestic passenger flights remains at about half of last year's level. This is shown by the red line in Figure 1.

But what about private flights, also known as general aviation (GA)? Because these flights typically use smaller planes, families or co-workers can have the aircraft to themselves, potentially making a GA flight an attractive option.

¹ It is worth noting that while reducing unnecessary travel during the pandemic is advisable to limit community spread of the virus, a number of studies have so far indicated that the risk of contracting COVID-19 by breathing aircraft cabin air is not particularly high, as long as passengers are wearing masks. See, for example: "Defense Department Study Finds Low Risk of Coronavirus Infection through Air on a Packed Airline Flight," The Washington Post, Oct. 15, 2020.

² This is measured by the number of passengers screened at TSA checkpoints.

As travel has fallen during the pandemic, passenger airlines have felt the impact. Air cargo and general aviation are a different story, however.
News reports have presented anecdotal evidence that charter and fractional flights are indeed faring better than commercial airlines. As shown in Figure 1, this seems to be supported by the data. Although the number of GA flights fell to record low levels during March and April, similar to commercial passenger flights, GA has recovered much faster. GA flights have recently been trending above 80 percent of last year’s levels.

**Figure 1**

What about cargo flights? On the one hand, economic activity overall has slowed considerably during the pandemic, which might reduce the total demand for cargo shipments. On the other hand, packages are not affected by travel restrictions, and most of us are doing a lot of online shopping these days. So, what does the data tell us?

The blue line in Figure 1 shows that flights by cargo airlines have actually increased above their 2019 levels. There are more dedicated cargo flights now than last year. Part of this is, in fact, due to increased domestic demand, as measured by pounds of cargo shipped.

Some of this increase, however, is also attributable to the reduction in passenger flights. Passenger aircraft typically carry cargo in their hold, often referred to as “belly cargo.” With passenger flights down, so is the space available for belly cargo, further boosting demand for the services of all-cargo flights, as shown in Figure 1.

It remains to be seen if these trends will persist over time and if they portend any long-term changes in demand.

For information about MITRE’s research in this arena, contact Joseph Hollenberg at joeh@mitre.org.

MITRE’s mission-driven teams are dedicated to solving problems for a safer world. Through our public-private funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

---

3 Figure 1 uses data on flights that filed flight plans with the FAA, also known as IFR flights. For GA, this typically includes most charter and fractionally owned aircraft, but often excludes many shorter recreational or training flights.