

Space Launch Airspace Impacts to Flight or Airline Operators

From an Airline Dispatcher Perspective:

There are many different variables when planning a flight from point A to point B. Some variables include weather conditions, airspace constraints, and aircraft performance considerations. During planning, a dispatcher looks for available routes from departure to destination, along with many NOTAMs and weather reports. As dispatchers plan these flights a couple of hours before departure, knowing the airspace restrictions with enough lead time is a priority. In selecting a route to the destination, dispatchers must have the appropriate fuel on board for the route and any constraints we may encounter (weather, staffing, volume, etc.). Some international routes require slot times crossing an airspace boundary. Missing the slot may result in fines and less-than-optimal slot times in the future.

The aircraft can only hold so much weight for structural and performance issues; balancing fuel and payload is challenging. Knowing when a space launch will occur allows us to plan the correct route and fuel to carry the entire payload. This is more of a day-of-operation event. For longer-range planning, knowing there will be an uptick in launches a particular week allows the airlines to make schedule adjustments and plan for the potential for reduced capacity in the NAS. Although the prohibited airspace may not be that large, other circumstances with the closed airspace could impede the system. The active launch area could reduce the limited available capacity.

For example, in Florida, with severe thunderstorms across the panhandle, there is limited space for flights to get through. One of the available areas may be out over the water, but that particular direction is reduced or closed due to a scheduled space operation. These kinds of restrictions inevitably lead to delays in the form of an Airspace Flow Program. Knowing this constraint with plenty of lead time allows airlines to plan the appropriate routes and fuel loads and proactively adjust schedules. The more proactive we can make these decisions, the happier the customer will be. Our customer, although their flight has been changed (canceled, delayed, re-accommodated), was given enough lead time that they are at home and not at the airport when this happens.

Only some of our General Aviation partners have a centralized dispatch office, which is not required. They rely on the pilots to read the NOTAMs and gather information from the FAA data sources. Sometimes, without timely information, they must land at a different destination to get more fuel before continuing. Providing the launch and impacted airspace plan with plenty of lead time will allow the General Aviation community to be more compliant with the route requirements.

From an Airline Network Perspective:

- When portions of the airspace are closed, flights may have to fly less than optimum routes to reach their destinations. These routes are generally longer and increase time utilization on our crew network. If our crews fly longer flights during the day there is the possibility of having to use our reserve crews, position additional crews to other areas of the network, or call in crews for overtime to cover the remaining flying for the day.
- Our customer service representatives are busy accommodating anyone impacted by late running flights. They are looking for available seats on other flights within our airline to get our customer to their destinations as close to their original itinerary as possible. This is a challenge, especially with high load factors and limited connecting flight capability. Knowing the constraints to the network early helps the Customer service agent find the least impactful re-accommodation for our customer.
- On-time performance is impacted when we fly these longer flights. If a flight arrives late because more flight time is incurred to avoid restricted airspace, it could affect the future legs of the flight. For example, if we arrive 30 minutes late due to a longer route, the next flight departs 30 minutes late, and each subsequent flight on that aircraft will be challenged to try and make up the time. Making up time is difficult to accomplish with the high utilization of the fleet.
- Some of our aircraft are scheduled for nightly maintenance. If the aircraft runs behind because of longer flight times, it arrives at the maintenance facility later than planned. This gives our technicians less time to complete their required tasks on the overnight shift. This can impact the next day operation if those aircraft are scheduled for early morning flights.