

Delta Airlines Flight 89 Fuel-Dumping Incident, Jan. 14, 2020

Background

- The FAA is conducting a thorough investigation of the Jan. 14, 2020 Delta Air Lines Flight 89 fuel-dumping incident, looking at both the exact nature of the problem and the crew's response.
- The flight from LAX to Shanghai, China, had 167 people on board 149 passengers and 18 crew members. It was on a standard departure route.
- At approximately 8,000 feet above ground level, when the plane was roughly over Gorman, the right engine began vibrating and the crew heard audible surging. The engine then stalled.
- At this time, the aircraft was flying on one engine, loaded with fuel for a long over-theocean flight, and over its maximum landing weight.
- The flight crew notified FAA air traffic control of the problem and declared an emergency.
- Air traffic control twice asked the flight crew if they wanted to hold and dump fuel before returning to LAX. The crew replied, "Negative" and indicated they wanted to land on a specific LAX runway.
- The plane began dumping fuel at about 8,000 feet altitude. The fuel dump continued until the plane was at about 2,500 feet altitude. Approximately 100,000 pounds of fuel was released during the entire course of the fuel dump.
- FAA air traffic control was not aware the fuel dump was occurring, and found out about it after the plane had landed.
- After the plane landed, an inspection revealed metal debris in the right engine tailpipe.

Policies and procedures

- Long-distance flights may need to dump fuel to create a safe landing weight if they have to return to an airport shortly after departure due to an emergency.
- Airlines have fuel-dumping procedures. Flight crews do not need FAA authorization to dump fuel, but these procedures require them to notify air traffic control that a fuel dump is occurring. The procedures also typically call for dumping fuel at or above 4,000 feet altitude if possible, so the fuel atomizes before reaching the ground.

- When flight crews notify air traffic control that they need to dump fuel, air traffic controllers will work with the crew to direct the plane to an appropriate fuel-dumping location and altitude if possible, depending on the nature of the emergency.
- While there are recommended altitudes for fuel dumping, FAA regulations do not specify a minimum altitude for fuel dumping. This is because of the wide range of emergency conditions that flight crews could potentially experience.
- In the Jan. 14 Delta Flight 89 emergency situation, part of the fuel-dumping procedure did not occur at an optimal altitude that would have allowed the fuel to atomize properly.
- FAA regulations give a captain the authority to do what is necessary in an emergency to
 get the aircraft safely on the ground. In an emergency situation that requires immediate
 decision and action, the captain may take any action that he or she considers necessary
 under the circumstances. This includes deviating from standard or normally required
 procedures.
- A review of various FAA databases identified 47 reported instances of fuel dumping by U.S. airlines worldwide during the last three years.

What's next?

- The FAA expects its investigation of this incident will take a few weeks to complete.
- The FAA will inform the public about the investigation findings.