



When Japan Airlines needed to get a grounded 787 in the air, we did the heavy lifting.



Case Study: Japan Airlines

Japan Airlines (JAL) is its home country's flag carrier. They were one of the first airlines to fly the revolutionary, and wildly popular, Boeing® 787 Dreamliner® aircraft. The plane is the cornerstone of JAL's fuel-saving strategy, and customers love its unmatched creature comforts.

Challenge

Being an early adopter of new aviation technology means any routine problem can become a challenge when you're the first to face it. When a ramp incident damaged an engine cowl on one of JAL's 787s, they faced an AOG (airplane on ground) situation they'd never seen before.

Solution

With just seven days to remove the grounded plane, JAL turned to UPS to figure out the logistical conundrum of transporting a 3,500-pound replacement cowl more than 2,600 miles.

Results

UPS utilized its ground transportation, aircraft charter and ocean freight expertise to not only get the replacement cowl to the grounded plane, but to get the damaged part back to the factory for repairs.

We deliver a lot of critical parts. Only a few of them weigh 3,500 pounds.

Labor Day weekend in the U.S. is one of the busiest travel times of the year, especially to exotic destinations like Hawaii. So when an AOG situation arises, it's a really big deal.

On Saturday, August 30, 2014, a jet bridge at the Honolulu International Airport collided with a Japan Airlines Boeing 787 Dreamliner, damaging the aircraft's left engine cowl. The 3,500-pound cowl is the front part of the engine compartment that guides airflow into the engine core.

The incident disabled the plane, canceling its scheduled flight, and rendering it unable to return to Japan for repairs.

For an older aircraft, this might have been a quick fix. But JAL was one of the first airlines to fly the new lightweight, fuel-efficient 787 Dreamliner after it debuted a few years earlier. So spare parts for 787s, especially parts that weigh nearly two tons, weren't so easy to find on a holiday weekend.

"At a home station in Japan, a situation like this is easier to resolve," said Takashi Ogata, Logistic Management Staff Manager for JAL Engineering. "In most cases, we would have a spare aircraft available to substitute for the grounded one. But at a foreign airport, we were forced to cancel the flight."

The nearest replacement cowl was 2,600 miles away, and moving such an enormous part presented a logistical challenge. To further complicate matters, the Honolulu airport had given JAL seven days to remove the grounded plane.

"This kind of aircraft downtime means a significant revenue loss from flight schedule disruptions, cancelled flights and additional expenses such as layover fees, hotel accommodation and food and beverage expenses for passengers," Ogata said. "But what worried us most was losing the confidence of our valued customers."

On Sunday, August 31, Ogata called Yuichiro Asari, JAL's UPS account executive in Tokyo. "We needed a top-notch logistics partner to

handle this unprecedented challenge," Ogata said. "We chose UPS because we believed their professionalism, practical experience and knowledge uniquely qualified them to deliver this huge aircraft part."

JAL had located the replacement cowl at a UTC Aerospace Systems facility in Chula Vista, CA. Now it needed someone to figure out how to bring the piece to Honolulu.

Asari and Sachiko Wakui, UPS Global Japan Sales Manager, went to work. Wakui, who was traveling in Texas when the cowl was damaged, returned immediately to her office in Los Angeles.

"Our relationship with JAL was fairly new," she said. "We'd been shipping spare parts for them for about a year, but moving the cowl on such a tight deadline was a much bigger job."

But situations like this weren't new to UPS. The world's largest shipping and logistics company offers multiple modes of transport, an extensive network of partners and deep experience solving customers' most challenging problems.

While Wakui provided almost hourly updates to anxious JAL executives, UPS logisticians addressed the colossal and meticulous task of delivering the replacement cowl. UPS worked with UTC to thoroughly understand the cowl's design specs, so they could determine the best way to transport it.

On the morning of Friday, September 5, UPS arranged ground transportation on a flatbed truck from Chula Vista to the San Diego International Airport. The 16-mile drive required special permits and an escort vehicle for the oversized load.

In San Diego, workers loaded the cowl onto a chartered Boeing 747. UPS had determined that only a 747 with nose-loading capability could accommodate the immense part. The flight departed for Honolulu at 5:15 pm.

The next morning mechanics installed the



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cowl, and the newly repaired 787 Dreamliner departed Honolulu for Narita International Airport in Japan. UPS then shipped the damaged cowl by ocean freight to the U.S. mainland for its long road trip for repairs at a UTC factory in Alabama.

"Our team acted quickly, relying on our vast multi-modal expertise," Wakui said. "It was a delicate operation that put our logistics skills and ingenuity to the test."

JAL was grateful and quick to praise UPS's fast and skillful response.

"I think that, but for the UPS team's support, we could not have successfully accomplished this task," Ogata said. "We were most impressed by UPS, and we hope to develop an even stronger relationship with UPS for future business."

To learn more: visit ups.com/aerospace.

