

## LAX's New Runway

## ■ LAX opens new south runway to improve airfield safety.

Photos and story courtesy Harold Johnson, LAX

AIRPORTS — Los Angeles Mayor Antonio R. Villaraigosa was joined April 2 by airport and federal aviation officials to welcome the first flight to land on the newly opened Runway 25 Left/7 Right located on the south side of Los Angeles International Airport (LAX). The project, which began last July, was completed on time and 5.7 percent under budget.

Completion of the new \$250-million runway is a major milestone in an overall \$333-million South Airfield Improvement Program, which seeks to improve airfield safety by reducing the number and severity of runway incursions that occur at LAX. The Federal Aviation Administration (FAA) defines runway incursions as any occurrence at an airport involving an aircraft, vehicle or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, landing or intending to land. For the four-year period from 2000 through 2003, LAX experienced the highest number of runway incursions of any U.S. commercial airport. In 2006, LAX experienced eight runway incursions, of which two were classified by the FAA as having had the serious potential to result in an accident. This year, LAX has experienced two runway incursions, of which the FAA classified neither as serious.

"Los Angeles International Airport is the U.S. West Coast's gateway to the world," said Mayor Villaraigosa. "Opening Runway 25 Left, as well as the future completion of the South Airfield Improvement Program, will benefit the traveling public with improved airfield safety and reduced aircraft taxi and idle item - thereby reducing harmful emissions into the air. In addition, LAX will be better able to efficiently handle the next generation of aircraft, such as the Airbus A380 and Boeing 787 Dreamliner, that are coming into



An American Airlines Boeing 757 touches down April 2 on LAX's Runway 25L, newly rebuilt and expanded. The American Airlines flight was the first to use the new runway.

service in the near future."

"Today we complete the first phase of modernizing LAX by taking a giant step towards improving the efficiency and safety of runway operations," Los Angeles City Councilmember Bill Rosendahl said. "This project is a great example of our partnership with the surrounding community, and demonstrates that we can and should work with local residents as we continue to modernize our airport."

"Los Angeles World Airports is proud of our partnership with the airlines and the Federal Aviation Administration to successfully complete the demolition and reconstruction of Runway 25 Left on time and under budget, and with minor impacts to the traveling public in terms of delays and with minor environmental impacts to our airport neighbors," said Samson Mengistu, LAWA acting executive director.

The runway opening follows an eight-month period during which the former Rwy 25L was demolished, relocated 55 feet south, and reconstructed to the same 11,095-foot long and 200foot wide measurements as the previous runway. Construction also included the relocation and replacement of all navigational and visual aids, as well as utilities, lighting, signage, grading and drainage. The runway portion of the overall South Airfield Improvement Program cost approximately \$250 million, or 5.7 percent under the \$265 million budgeted for the runway. Funding sources for the entire \$333-million South Airfield Improvement Program include airline landing fees; \$108.3 million from FAA airport improvement funds; and airport operating revenues and capital improvement funds.

Construction will now begin on a center taxiway to run parallel and between the two south runways, followed by constructing taxiways linking the two runways to the new center taxiway. These next phases of the South Airfield Improvement Program will take 18 months to complete.

LAX has spent tens of millions of dollars since the late 1990s to enhance airfield safety with redundant signage and markings. While these new measures have resulted in a significant reduction in runway incursions, adding the new center taxiway is expected to reduce the possibility of human error by requiring aircraft landing on Rwy 25 Left to exit the runway and travel down the center taxiway and then hold until authorized by air traffic controllers to cross the inner Rwy 25 Right to reach the passenger terminal gates. In a joint study with LAWA, the FAA and NASA Ames Research Center's FutureFlight Central, air traffic controllers found that the center taxiway offered an effective solution to the primary cause of the most severe types of runway incursions experienced at LAX.

The runway project, as well as the overall South Airfield Improvement Program, incorporated several innovative practices to reduce environmental impacts from construction on areas in and around LAX. The South Airfield Improvement Program is the first of the LAX Master Plan "green lighted" projects. As part of the LAX Master Plan Environmental Impact Report, and in accordance with Los Angeles City and California state regulatory requirements with and consultation community leaders, Los Angeles World Airports developed several measures to minimize construction impacts, including:

■ Recycling 100 percent of all the materials from the old runway into the new runway and taxiway

- Placing concrete mixers and other equipment on-airport, thus reducing the number of trips service vehicles must take to and from the construction site
- Designating specific routes that service vehicles must use
- Retrofitting equipment and machinery to reduce noise and emissions
- Continually dampening the work area to reduce dust

Of note during the demolition phase, workers excavated a 1,000-foot length of the original runway, which dated back to the 1950s-1960s, when jet air service first began at LAX. The discovery and removal of the old runway set the construction schedule back by 23 days, but the days were made up by workers accelerating other parts of the project.

The FAA reported that while Rwy 25L was under construction, air traffic controllers and airlines were able to maintain relatively normal flight schedules using the two northern runways and remaining southern runway. Air traffic controllers at LAX report that only 0.4 percent (less than one-half of one percent) of all flights into and out of LAX was delayed due to the runway

Minimal delays had been expected because LAX is operating at approximately 1,800 daily operations, which is 25 percent fewer than the 2,200 daily operations prior to Sept. 11, 2001, when LAX airlines operated more flights that were less full. In 2000, LAX handled 67 million passengers and last year handled 61 million. The 25 percent reduction in flights allowed the airport to absorb the 25 percent reduction in runway capacity.



