National Transportation Safety Board
Aviation Incident Final Report

Location:	Los Angeles, CA	**Incident Number:**	OPS07IA009A
Date & Time:	08/16/2007, 1257 PDT	**Registration:**	
Aircraft:	Boeing 737-700	**Aircraft Damage:**	None
Defining Event:		**Injuries:**	142 None
Flight Conducted Under:			

Analysis

On August 16, 2007, at approximately 1257 Pacific daylight time, a runway incursion occurred involving West Jet (WJA) 900, B737 and Northwest Airlines (NWA) flight 180, an A320, at Los Angeles International Airport, Los Angeles, California.

WJA900 landed on runway 24R and exited at taxiway Y then changed to ground control frequency without authorization while the airplane was holding between the parallel runways. The tower controller cleared NWA180 for takeoff from runway 24L. Meanwhile, the pilot of WJA900 contracted ground control and said, "Ground, WJA900 with you on reverse [taxiway] yankee for gate 35." The ground controller believed that the tower controller had instructed the flight to cross runway 24L and responded, "WJA900, Los Angeles tower, taxi [via taxiway] echo to the gate."

Ten seconds later, the pilot of WJA900 confirmed that the flight was cleared to cross runway 24L. The ground controller asked who called and the pilot again asked whether or not they were cleared to cross the runway. The ground controller then realized that WJA900 had not been instructed to cross runway 24L and told WJA900 to stop. According to the FAA and WJA, the airplane crossed the hold short line but did not enter the runway. According to the FAA, the two aircraft missed colliding by 37 feet (wingtip of A320 to the nose of the B737) as NWA180 departed runway 24L.

The Airport Movement Area Safety System (AMASS) activated on this incident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The LAX north ground controller's failure to properly coordinate with the tower local controller prior to providing taxi instructions that permitted an aircraft to cross an active runway while another aircraft was departing.

This report was modified on December 12, 2007.

Findings

Occurrence #1: NEAR COLLISION BETWEEN AIRCRAFT
Phase of Operation: TAXI - FROM LANDING

Findings
1. (C) CONTROL TOWER - IMPROPER

Factual Information

On August 16, 2007, at 1257 Pacific Daylight time, a runway incursion occurred involving West Jet (WJA) flight 900 and Northwest Airlines (NWA) flight 180 at Los Angeles International Airport, Los Angeles, California during daytime visual flight rules conditions. WJA900 landed runway 24R and exited on reverse taxiway Y. While exiting, the flight crew of WJA 900 switched to the north ground control (GC2) frequency without instruction and advised they were on the reverse taxiway, Y, for gate 35. The GC2 controller thought that the WJA aircraft was south of runway 24L and instructed the flight to taxi via taxiway E to the gate. When WJA900 was approaching runway 24L on the reverse taxiway, the pilot saw NWA180 begin its take-off roll and questioned whether or not they had clearance to cross the runway. The GC2 controller, realizing WJA 900 had not received a crossing clearance, stopped WJA900 from crossing the runway. The Airport Movement Area Safety System (AMASS) alerted and separation was lost. According to the AMASS data, NWA180 passed within 37 feet of the WJA 900. The FAA classified this incident as a controller operational error, a pilot deviation, and a runway incursion.

According to the North Local Controller (LC2), he stated that he took the LC2 position when WJA900 was on a 2 mile final for runway 24R. He then instructed NWA180 to taxi onto runway 24L, conducted some coordination, and then cleared NWA180 for takeoff. As he was looking at the tower radar display to determine the next arrival aircraft, he heard the AMASS alert: Warning, runway occupied. He looked at the aircraft involved (WJA900 and NWA180) and saw WJA900 stopped on taxiway Y short of runway 24L but across the hold bars. NWA180 appeared to be past V1 speed so he allowed the aircraft to continue on departure roll. He stated that he did not recall receiving any verbal coordination from GC2 about crossing runway 24L.

According to the North Ground Controller (GC2), he stated that when WJA900 made initial contact on the GC2 frequency, he looked at the airplane. The pilot advised they were on taxiway Y and were going to gate 35. The GC2 controller stated that he looked from the airplane to the gate and verified the gate available then scanned back to the airplane to determine the appropriate taxi route. Seeing no traffic between WJA900 and the gate, he told him to taxi to the gate. Immediately after issuing the taxi instructions to WJA900, he scanned west for conflicting traffic on the taxiway and noted there was an America West jet and issued a sequence to those crews. The GC2 stated that he did not look to the approach end of runway 24L and did not coordinate with LC2, as he did not recognize that WJA900 was north of runway 24L, needing to cross the active runway.

The GC2 controller stated that the training he received for that type of situation was to ask the LC2 to confirm that the flight had been cleared to cross the runway. In this incident, he stated he did not do that because he did not recognize that WJA900 was north of runway 24L. He added that it was not a willful breaking of the rules. He did not believe he was crossing the aircraft.

TOWER FACILITY INFORMATION

The Los Angeles Air Traffic Control Tower is a Level 12 ATC facility. The tower is centrally located on the airport between the north and south complexes. The tower can accommodate

up to 13 positions; 2 local control (LC1/LC2), 2 local assist (LA1/LA2), 3 ground control (GC1/GC2/GC3), 2 clearance delivery (CD1/CD2), 1 helicopter position (HC), 1 traffic management coordinator (TM), and 2 supervisors (AS1/AS2).

On the day of the incursion, LAX was in a west configuration, and the inboard runways, 24L and 25R, were in use for arriving and departing aircraft. The north complex was landing and departing runway 24R/24L and the south complex was landing and departing runway 25R/25L.

AMASS

AMASS is a computer software enhancement to the airport surface detection equipment (ASDE). The system provides logic predicting the path of aircraft landing and/or departing, and aircraft and/or vehicle movements on runways. Visual and auditory alerts are activated when logic projects a potential collision. AMASS alerts controllers to a potential collision when an aircraft or vehicle is occupying a runway and when arriving or departing aircraft cross a certain threshold or attain a certain speed. The system works by processing surveillance data from ground radar, and then predicting possible conflicts based on the position, velocity, and acceleration of arriving and departing aircraft and vehicles.

Pilot Information

Certificate:	**Age:**
Airplane Rating(s):	**Seat Occupied:**
Other Aircraft Rating(s):	**Restraint Used:**
Instrument Rating(s):	**Second Pilot Present:**
Instructor Rating(s):	**Toxicology Performed:**
Medical Certification:	**Last FAA Medical Exam:**
Occupational Pilot:	**Last Flight Review or Equivalent:**
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Boeing	**Registration:**	
Model/Series:	737-700	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:		**Serial Number:**	
Landing Gear Type:		**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	
Airframe Total Time:		**Engine Manufacturer:**	
ELT:		**Engine Model/Series:**	
Registered Owner:		**Rated Power:**	
Operator:		**Operating Certificate(s) Held:**	Foreign Air Carrier (129)
Operator Does Business As:		**Operator Designator Code:**	DTYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	
Observation Facility, Elevation:	KLAX	**Observation Time:**	1250
Distance from Accident Site:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Temperature/Dew Point:**	22°C / 16°C
Lowest Ceiling:	None	**Visibility**	8 Miles
Wind Speed/Gusts, Direction:	10 knots, 230°	**Visibility (RVR):**	
Altimeter Setting:	29.93 inches Hg	**Visibility (RVV):**	
Precipitation and Obscuration:			
Departure Point:	CALGARY ALTA (YYC)	**Type of Flight Plan Filed:**	IFR
Destination:	Los Angeles, CA (KLAX)	**Type of Clearance:**	
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	6 None	**Aircraft Damage:**	None
Passenger Injuries:	136 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	142 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Hilton Hall	**Adopted Date:**	11/30/2007
Additional Participating Persons:	Dan Diggins; HQ		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		