



Aviation Investigation Final Report

Location:	PACIFIC OCEAN, Pacific Ocean	Accident Number:	LAX99LA212
Date & Time:	June 9, 1999,	Registration:	N198UA
Aircraft:	Boeing 747-422	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 325 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

While en route from Singapore to Narita, Japan, a flight attendant proceeded to transfer a serving cart from the main deck to the upper deck. As the flight attendant pushed the cart into the lift, the lift began to move. The lift continued to raise, catching the edge of the cart and lifting it off the ground, trapping the flight attendant between the other end of the cart and the galley counter opposite the lift. As the cart was raised off the floor, the flight attendant was lifted off her feet and her body was pushed on top of the galley counter. The cart continued to rise, pinning the flight attendant's face between the cart and the bins above the galley counter. An inspection of the galley lift after landing revealed a piece of cardboard had been inserted into the interlock safety switch, disabling it, and by doing so, the galley lift can be operated without closing the galley lift door. This condition is known to have been caused, in other incidents, by food service personnel to expedite loading of food service aboard the aircraft.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: intentional tampering/altering of a galley lift interlock microswitch by unknown persons.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) MISC EQPT/FURNISHINGS,GALLEY/PERSONNEL LIFT - FOULED
2. (C) EQUIPMENT,OTHER - IMPROPER USE OF - UNKNOWN

Factual Information

On June 9, 1999, about 0245 hours coordinated universal time, a Boeing 747-422, N198UA, operating as United Airlines Flight 890, experienced a serious cabin attendant injury while en route from Singapore to Narita, Japan. The flight over international waters had departed Singapore at 2341 on June 8, 1999, destined for Narita. The flight was operated by United Airlines, Inc., of Chicago, Illinois, as a scheduled international passenger flight under 14 CFR Part 121 of the Federal Aviation Regulations. Neither the airline transport pilot captain and first officer, the remaining 17 cabin attendants or 306 passengers were injured.

At 0245, the captain contacted dispatch and reported a diversion to Hong Kong due to an accident in the galley involving a flight attendant. According to a United Airlines report, the flight attendant was injured in the main deck galley while using the lift to move carts to the upper deck.

The flight attendant was in the process of placing a cart in the lift when it began to move, having been called from the upper deck. The upward movement of the lift caused the cart to roll out of the lift, striking and pinning the flight attendant against the galley wall. The lift continued to raise, catching the edge of the cart, and lifting it off the floor, trapping the flight attendant between the other end of the cart and the galley counter opposite the lift. As the cart was raised off the floor, the flight attendant was lifted off her feet and her body was pushed on top of the galley counter. The cart continued to rise, pinning the flight attendant's face between the cart and the bins above the galley counter.

An inspection of the galley lift at Hong Kong revealed a piece of cardboard had been inserted into the interlock safety switch, disabling it, and by doing so, the galley lift can be operated without closing the galley lift door.

As a result of other similar upper deck cart accidents/incidents Boeing has issued a Service Bulletin 747-25-3187 to modify the control panel to allow only the person working on the cart lift to send it.

Pilot Information

Certificate:	Airline transport; Flight engineer	Age:	58, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 1, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	19127 hours (Total, all aircraft), 603 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N198UA
Model/Series:	747-422 747-422	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28716
Landing Gear Type:	Retractable - Tricycle	Seats:	391
Date/Type of Last Inspection:	August 17, 1998 Continuous airworthiness	Certified Max Gross Wt.:	875000 lbs
Time Since Last Inspection:	4002 Hrs	Engines:	4 Turbo fan
Airframe Total Time:	8439 Hrs	Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	P&W4056
Registered Owner:	UNITED AIRLINES INC.	Rated Power:	56000 Lbs thrust
Operator:	UNITED AIRLINES	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	UALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SINGAPORE , OF (SIN)	Type of Flight Plan Filed:	IFR
Destination:	NARITA , OF (NRT)	Type of Clearance:	IFR
Departure Time:	07:25 Local	Type of Airspace:	Class A

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Serious, 19 None	Aircraft Damage:	None
Passenger Injuries:	306 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 325 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	MIKE WHITE; BURLINGAME , CA JEFF PLANTZ; CHICAGO , IL
Original Publish Date:	November 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=46501

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).