



# **Aviation Investigation Factual Report**

Location: CHICAGO, Illinois Incident Number: CHI93IA127

Date & Time: March 21, 1993, 08:06 Local Registration: N374MQ

Aircraft: de Havilland SHD-6 Aircraft Damage: None

**Defining Event:** 3 None

Flight Conducted Under: Part 121: Air carrier - Scheduled

#### **Factual Information**

On March 21, 1993, at 0806 central standard time, minimum air traffic control separation was lost between N374MQ, a DeHavilland SHD-6, operated as Simmons Flight 4085, and N361UA, a Boeing 737, operated as United Airlines Flight 556. Both airplanes had departed on Runway 22L at the O'Hare International Airport, Chicago, Illinois, just prior to the loss of separation. Visual meteorological conditions prevailed and IFR flight plans were filed. There were no injuries or damage reported as a result of this incident.

Both airplanes had departed runway 22L which was being controlled by the South Local Controller (SLC). This controller was responsible for arrivals on runway 27L and departures from runway 22L and 32L T-1 intersection.

The events which resulted in the loss of separation occurred as follows:

At 0802, Simmons 4085 was cleared for takeoff and instructed to fly the runway heading.

At 0803, Simmons 4085 was instructed to fly a heading of 200 degrees.

At 0804, United 556 was cleared for takeoff and instructed to fly a heading of 140 degrees. United 556 was instructed not to delay it's takeoff roll.

At 0805, Simmons 4085 was instructed to contact departure control.

At 0806, United 556 is instructed once again to fly a heading of 140 degrees. Twelve seconds later, United 556 is instructed to maintain 4,000 feet. Ten seconds later, the flight is instructed to contact departure control. (The controller stated she stopped United's climb at 4,000 feet because without turning to 140 degrees, it would have over taken the slower Simmons flight ahead of it. However, by this time the loss of separation had already occorred.)

Air Traffic Control Handbook 7110.65G, paragraph 5-72 states, "Separate aircraft by the following minima: a.1. when less than 40 miles from the antenna-3 miles." According to radar data, lateral separation between Simmons 4085 and United 556 decreased to 2.25 miles with 400 feet of vertical separation.

See Air Traffic Control/Human Performance Group Chairman's Factual Report and Attachments for CHI-93-I-A115.

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#### **Pilot Information**

Certificate:	Airline transport; Commercial	Age:	37,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 Medicalno waivers/lim.	Last FAA Medical Exam:	May 21, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	de Havilland	Registration:	N374MQ
Model/Series:	SHD-6 SHD-6	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	
Landing Gear Type:	Retractable - Tricycle	Seats:	20
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A
Registered Owner:	SECURITY PACIFIC EQUIPT LEASIN	Rated Power:	620 Horsepower
Operator:	SIMMONS	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	SIMA

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ORD ,667 ft msl	Distance from Accident Site:	
Observation Time:	07:50 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Unknown / 3700 ft AGL	Visibility	5 miles
Lowest Ceiling:	Overcast / 3700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	1°C / -1°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	(ORD)	Type of Flight Plan Filed:	IFR
Destination:	DECATUR (DEC)	Type of Clearance:	IFR
Departure Time:	08:02 Local	Type of Airspace:	Class E

### **Airport Information**

Airport:	O'HARE INT'L AIRPORT ORD	Runway Surface Type:	
Airport Elevation:	677 ft msl	<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

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#### **Administrative Information**

Investigator In Charge (IIC): Sullivan, Pamela Additional Participating ALAN LEBO; WASHINGTON , DC SIMPSON; WASHINGTON . DC **SANDY** Persons: BURT SIMON; WASHINGTON , DC TIMOTHY CARMODY; WASHINGTON , DC **Report Date:** May 4, 1994 **Last Revision Date: Investigation Class:** Class Note: **Investigation Docket:** https://data.ntsb.gov/Docket?ProjectID=9191

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.

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