## Ground collision, Douglas DC-9-31 and Airbus A340, Chicago O'Hare, December 13, 2000

Micro-summary: This Douglas DC-9-31 was struck by an Airbus A340 on the ground.

Event Date: 2000-12-13 at 2050 CST

Investigative Body: National Transportation Safety Board (NTSB), USA

Investigative Body's Web Site: http://www.ntsb.gov/

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National Transportation Safety Board
FACTUAL REPORT
ANIATION

NTSB ID: CHI01IA046A

Aircraft Registration Number: N9342

Occurrence Date: 12/13/2000

Most Critical Injury: None

Occurrence Type: Incident

Investigated By: NTSB

Location/Time

Airport Proximity: On Airport	Distance Fror	n Landing Facility:		Direction Fro	m Airport:
Chicago	IL	60666	2050	CST	
Nearest City/Place	State	Zip Code	Local Time	Time Zone	

Aircraft Information Summary

Aircraft Manufacturer	Model/Series	Type of Aircraft
McDonnell Douglas	DC-9-31	Airplane

Sightseeing Flight: No Air Medical Transport Flight: No

#### Narrative

 $\label{lem:conditions} \mbox{Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:}$ 

HISTORY OF FLIGHT

On December 13, 2000, at 2050 central standard time, a McDonnell Douglas DC-9-31, N9342, operating as Northwest Airlines flight 142, sustained minor damage when its tail was struck by the wing of an Airbus A-340, TC-JII, operating as Turkish Airlines flight 6. The A-340 sustained minor damage. The incident occurred during taxi operations at O'Hare International Airport (ORD), Chicago, Illinois. At the time of the incident, Northwest Airlines flight 142 was stopped on taxiway B, just short of taxiway A-10, awaiting clearance to proceed to gate E-11, following landing. Turkish Airlines flight 6 was taxiing the opposite direction on taxiway A, and turned via taxiway A-9 to proceed to runway 09R, for departure. Night instrument meteorological conditions prevailed at the time of the incident. Northwest Airlines flight 142 was conducting scheduled domestic passenger service from Minneapolis, Minnesota, to Chicago, and operating on an instrument flight rules flight plan, under 14 CFR Part 121. Turkish Airlines flight 6 was conducting scheduled international passenger service from Chicago to Istanbul, Turkey, and operating on an instrument flight rules flight plan, under 14 CFR Part 129. No injuries were reported by the 4 crew and 81 passengers on Northwest Airlines flight 142. There were no reported injuries to the 14 crew and 150 passengers on Turkish Airlines flight 6. Following the incident, both airplanes were towed to their respective gates where the passengers deplaned normally.

In his written statement, the captain of Northwest Airlines flight 142 said that after a normal landing on runway 9L, they received taxi instructions from the ORD Air Traffic Control Tower (ATCT) to taxi to gate E-11 via taxiway H and B. The captain said his taxi speed was slow due to snow covering the taxiways and blowing snow. The captain said that passing taxiway A-9, the first officer contacted ramp control for clearance into the ramp. The captain said they were told that an aircraft was blocking the taxiway A-10 entrance to the ramp and waiting for a tug to assist The captain said, "ATC asked us if we could use txy (taxiway) A-9 and we advised that we had passed A-9 and were committed to entering the ramp at A-10. ATC then asked if we could enter [the] ramp at A-10 behind the disabled aircraft. We responded negative, txy (taxiway) A-10 was blocked and we had to wait until [the] disabled aircraft was moved. We advised ATC we were stopped on txy (taxiway) B between A-9 and A-10. ATC instructed us to hold our position until [the] aircraft at A-10 was moved. Our aircraft was stopped with the parking brake set." The captain said, "[The] First officer and I both noticed the Turkish Airways Airbus A340 taxi past us on the inner taxiway A in the opposite direction. Three to five minutes later, our DC-9 made an abrupt, sliding left turn towards the taxiway edge lights. I grabbed the throttles and nose tiller to confirm the brakes were set." The captain said that shortly afterward the aft flight attendant called the lead flight attendant and told him "our tail was struck by another aircraft. We notified ATC we were struck by the Turkish Airways A340."

In his written statement, the captain of Turkish Airlines flight 6 said that after de-icing, they pushed back and were positioned facing west for a runway 09R departure. The captain said that ORD

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Narrative (Continued)

ATCT gave them taxi instructions, "alpha, mike-two, mike, tango". "We were told to hold short of alpha-ten. Then changed, continue [to] alpha-nine. We stopped at alpha-nine. We saw the Northwest DC-9 on taxiway bravo. The tail [of Northwest Airlines flight 142] was off of [taxiway] bravo and on [taxiway] alpha." The captain said that they were then instructed to "use alpha-nine to tango to cross runway 14. We told them we were unable to move ahead. The Northwest tail was very close. Ground control told us, go ahead join tango. They were persistent that we join tango. I can't see back there. Plus, another plane is on [taxiway] bravo to cross in front of us. We started, then said no, not possible. We stopped but we slipped. Our wingtip touched their tail."

The ground controller on duty at ORD ATCT said that Turkish Airlines flight 6 was taxiing northbound for runway 9R. He said that Turkish Airlines flight 6 was instructed to use taxiways alpha, A-9 and tango. The controller said, "I observed THY6 (Turkish Airlines flight 6) holding by A10 and I again restated my instructions. THY6 acknowledged and continued taxiing toward A9. THY6 turned at A9 and clipped the rudder of a NWA (Northwest Airlines) DC9 on Taxiway Bravo."

#### METEOROLOGICAL CONDITIONS

At 2056, the automated surface observation system (ASOS) at O'Hare International Airport reported few clouds at 1,700 feet msl, a broken ceiling at 2,500 feet msl, and an overcast ceiling at 5,500 feet msl. The reported visibility was 1/2 mile with light snow and mist. The runway visual range for runway 14R was reported as 4,000 feet variable 6,000 feet. The temperature was 23 degrees F, dew point 21 degrees F, winds 070 degrees at 6 knots, and an altimeter of 30.12 inches of mercury.

#### WRECKAGE AND IMPACT INFORMATION

The Safety Board's on scene investigation began on December 14, 2000, at 0900.

#### Northwest Airlines flight 142

The DC-9-31 airplane was examined in Northwest Airline's ORD maintenance hangar. The left side of the airplane's rudder showed longitudinally running dents and scratches at approximately 2/3rds span up from the base. The dents and scratches were confined to an area approximately 10 inches wide. The dents and scratches spanned the entire width of the rudder. The trailing edge of the rudder was bent right at the end of the dented area. The rudder hydraulic actuator was broken off from its mount on the aft bulkhead, forward of the tailcone seal, and was pushed through the upper right side of the fuselage. No other damage was observed.

#### Turkish Airlines flight 6

The A340 airplane was examined at gate M-17 at the ORD International Terminal. The airplane's left outboard leading edge slats showed two inward dents, one in the leading edge of each, at approximately 11 feet and 14 feet inboard of the wingtip. No other damage was observed.

#### ADDITIONAL INFORMATION

Parties to the investigation were the Federal Aviation Administration Flight Standards District Office, Schiller Park, Illinois, and Northwest Airlines.

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FACTUAL REPORT
AVIATION

NTSB ID: CHI01IA046A

Occurrence Date: 12/13/2000

AVIATION	urrence Type: Incident												
Landing Facility/Approach Inf	formation												
Airport Name	Airport ID:	Airport Eleva	tion	Runv	way Used	Runway Length			Runv	vay Width			
O'Hare International Airport			ORD	658 Ft	. MSL								
Runway Surface Type: Unknown													
Runway Surface Condition: Unknown													
Type Instrument Approach: Unknown													
VFR Approach/Landing: Unknown													
Aircraft Information													
Aircraft Manufacturer McDonnell Douglas				el/Series ·9-31						Serial Number 47391			
Airworthiness Certificate(s): Transport													
Landing Gear Type: Retractable - Tricycle													
Homebuilt Aircraft? No	Number of Seats:	85	Certif	Certified Max Gross Wt.			110000 LBS Numbe			er of Engines: 2		: 2	
				Engine Manufacturer: Model/Series: JT8D-5					Rated Power: 12000 LBS				
- Aircraft Inspection Information													
Type of Last Inspection			Date of La	Date of Last Inspection Time Si			ince Last Inspection				Airframe Total Time		
Continuous Airworthiness			10/2000			352 Hours 80				292 Hours			
- Emergency Locator Transmitter (	ELT) Information				•				•				
ELT Installed? No	ELT Operat	ed? No	)	ELT Aided in Locating Accident Site? No									
Owner/Operator Information													
Registered Aircraft Owner			Stree	Address	ant C006	20 E	101 Northu	oot Driv	10				
Northwest Airlines, Incorporate	ed .		Department C8960, 5101 Northwest Drive City							State	e	Zip Code	
				St. Paul						MN		55111	
Operator of Aircraft			Street Address Same as Reg'd Aircraft Owner										
Same as Reg'd Aircraft Owner	City St. Paul							State MN	е	Zip Code 55111			
Operator Does Business As: North	west Airlines					Ор	erator Desig	nator Co	ode: NV	VAA			
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s):	Flag Carrier/Don	nestic											
Operating Certificate: Operator Certificate:													
Regulation Flight Conducted Under	r: Part 121: Air Ca	arrier											
Type of Flight Operation Conducted	l: Scheduled; Do	mestic;	Passeng	er Only									
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AVIATION

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Occurrence Date: 12/13/2000

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AVIATION	Occurrence Type: Incident										
First Pilot Information											
Name			City			Stat	te	Date of Birth	Age		
On File			On File	)		On	File		43		
Sex: M Seat Occupied: Left Prin	ncipal Profess	n Pilot	ot Certificate Number:								
Certificate(s): Airline Transport; Flight Eng	jineer			•							
Airplane Rating(s): Multi-engine Land; Single-e	ngine Land										
Rotorcraft/Glider/LTA: None											
Instrument Rating(s): Airplane											
Instructor Rating(s): None											
Type Rating/Endorsement for Accident/Incident Aircra	ft? Yes			Current E	Biennial Flight	t Review	v?				
Medical Cert.: Class 1 Medical Cert. Status	S: Valid Med	dicalno wa	aivers/li	m.	Date of	Last Me	edical E	xam: 07/2000			
,											
- Flight Time Matrix All A/C This Make and Model	Airplane Single Engine	Ni.		Instrument Actual Simu			Rotorcraft	Glider	Lighter Than Air		
Total Time 7641 5399											
Pilot In Command(PIC)											
Instructor											
Last 90 Days 145											
Last 30 Days											
Last 24 Hours 9 9		9									
Seatbelt Used? Yes Shoulder Harness	Used? Yes			Toxicology Performed? No Second Pilot? Yes							
Flight Diag His area											
Flight Plan/Itinerary Type of Flight Plan Filed: IFR											
Departure Point			Т	State	Airport Identi	entifier Departur		ture Time	Time Zone		
Minneapolis				MN MSP		1950			CST		
Destination				State	Airport Identi	ifier					
Same as Accident/Incident Location					ORD						
Type of Clearance: IFR			•	•							
Type of Airspace: Class B											
Weather Information											
Source of Briefing:  Company											
Method of Briefing: In Person											
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AVIATION

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Occurrence Date: 12/13/2000

Occurrence Type: Incident

	FIYBOR		Occurrent	е туре.	moluem										
Weather Information															
WOF ID	Observation Time	Time Zone	WOF Elevati	on	WOF Distance From Accident Site					Direction From Accident Site					
ORD	2056	CST	658 Ft.	MSL	1 NM 30						30 Deg. l	Mag.			
Sky/Lowes	et Cloud Condition:			Ft. AGL					Condition of Light: Night/Dark						
Lowest Ce	iling: Broken	2500 Ft.	AGL	Visibi	lity:	0.5	SM	Altiı	meter:	30.12	"Hg				
Temperatu	ıre: -5 °C [	Dew Point:	-6 °C	Wind	Wind Direction: 70 Density Altitude: -1806										
Wind Spee	ed: 6	Gusts:		Weather Conditions at Accident Site: Instrument Conditions											
Visibility (R	RVR): Ft.	Visibility (R\	/V)	SM	Intensity	of Precipita	ition: [	Light							
Restriction	Restrictions to Visibility: Blowing Snow														
Type of Precipitation: Snow															
Accident	Accident Information														
Aircraft Damage: Minor Aircraft Fire: None Aircraft Explosion None															
Classificati	on: U.S. Registered/U.	.S. Soil													
- Injury Su	mmary Matrix	Fatal Se	rious Mino	r	None	TOTAL									
First Pi	lot				1	1									
Second	d Pilot				1	1									
Studen	t Pilot														
Flight In	nstructor														
Check	Pilot														
Flight E	ngineer														
Cabin A	Attendants				2	2									
Other C	Crew														
Passen	gers				81	81									
- TOTAL A	ABOARD -				85	85									
Other C	Ground														
- GRAND	TOTAL -				85	85									
		•	•												

National Transportation Safety Board

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Occurrence Type: Incident

#### Administrative Information

Investigator-In-Charge (IIC)

David C. Bowling

Additional Persons Participating in This Accident/Incident Investigation:

Vince Terrell Air Safety Inspector Federal Aviation Administration 9950 W. Lawrence Avenue #400 Schiller Park, IL 60176

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