



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	CHICAGO, IL	<b>Accident Number:</b>	CHI00LA076
<b>Date &amp; Time:</b>	02/21/2000, 1730 CST	<b>Registration:</b>	N1403M
<b>Aircraft:</b>	Fokker F28 MK100	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 6 Minor, 46 None

**Flight Conducted Under:** Part 121: Air Carrier - Scheduled

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## Analysis

They reported seeing the refueling truck parked at a 45 degree angle to the lead in line on the right side of the airplane. The truck then moved forward and contacted the right side of the airplane near the nose gear where it came to rest. The airplane just arrived at the gate and the jet bridge was not yet in place. The airplane was pushed several feet to the left by the impact. One witness reported the truck was traveling between 20 and 30 miles per hour and another witness reported it was traveling 'a little to fast.' Witnesses who saw and helped the fuel truck driver out of his vehicle after the accident reported that he appeared to be 'dazed'. At least 20 passengers who stood up immediately when the airplane reached the gate were 'thrown about' when the impact occurred. The driver of the refueling truck did not remember the impact and reported he must have 'blacked out.' A medical and sleep study evaluation of the driver showed he suffered from severe obstructive sleep apnea and significant hypersomnolence. The same driver was involved in another occurrence in October, 1999. He reported 'dosing off' just prior to that collision.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the driver of the refueling truck fell asleep which resulted in him not maintaining clearance with the parked aircraft. Factors associated with the accident were severe obstructive sleep apnea and significant hypersomnolence which resulted in chronic fatigue.

## Findings

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Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: STANDING

### Findings

1. OBJECT - VEHICLE
2. (C) CLEARANCE - NOT MAINTAINED - DRIVER OF VEHICLE
3. (F) PHYSIOLOGICAL CONDITION - DRIVER OF VEHICLE
4. (F) FATIGUE(CHRONIC) - DRIVER OF VEHICLE

## Factual Information

On February 21, 2000, at 1730 central standard time, a Fokker F28 MK 100, N1403M, operated by American Airlines as Flight 1801, was parked at gate K-17 at the O'Hare International Airport, Chicago, Illinois, when it was struck by a refueling truck. The truck driver received serious injuries. Four passengers and two flight attendants received minor injuries. The flight crew, 1 flight attendant and 43 passengers were not injured. The airplane received substantial damage, as did the truck. The flight was operating under 14 CFR Part 121. Visual meteorological conditions prevailed. The flight originated at Rochester, Minnesota, at 1643 cst.

According to witnesses, Flight 1801 had just arrived at the gate and the jet bridge was not yet in place against the airplane. They reported seeing the refueling truck parked at a 45 degree angle to the lead in line on the right side of the airplane. The truck then moved forward until it contacted the right side of the airplane near the nose gear where it came to rest. Witnesses reported the airplane was pushed several feet to the left by the impact. One witness reported the truck was traveling between 20 and 30 miles per hour and another witness reported it was traveling "a little to fast." Witnesses who saw and helped the fuel truck driver out of his vehicle after the accident reported that he appeared to be "dazed".

One of the flight attendants reported that at least 20 passengers stood up immediately when the airplane reached the gate. She reported that these passengers were "thrown about" inside the airplane when the impact occurred. The two flight attendants that were injured had left their seats to prepare the airplane for arrival.

The driver of the refueling truck told an American Airlines Ground Service Manager that he remembered "...starting to pull in front of the wing, and then becoming aware that he was in the truck cab, and was against the aircraft. He said he really did not remember how he got out of the truck. ... I asked him if he had been having any trouble staying awake earlier in the day. He told me that he felt fine, and was not having any problems. He told me that he had apparently just 'blacked out'."

The driver of the fuel truck was hospitalized for treatment and observation, and was released on February 24, 2000. In addition, the driver underwent a sleep study. A neurologist who evaluated the driver during and following his hospitalization after the accident reported, "I met with the patient reviewing the results of his sleep study which shows severe obstructive sleep apnea and significant hypersomnolence. The short REM latency and REM intrusions on MSLT may be seen with severe sleep apnea. The possibility of coexistent narcolepsy is felt to be unlikely, and cannot be assessed until the patient is well treated for his sleep apnea."

The same driver was involved in another accident on October 30, 1999, in which the refueling truck he was driving contacted two other refueling trucks in the Fuel Center parking lot. The driver reported he was going to back into a parking spot when he "dosed off" and was awakened by the impact. Following this collision American Airlines concluded "[The Driver] used poor judgement when he reported to work after not getting sufficient rest." No corrective action was recommended.

## Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Engineer	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Multi-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	02/24/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8540 hours (Total, all aircraft), 2500 hours (Total, this make and model), 4250 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	Fokker	<b>Registration:</b>	N1403M
<b>Model/Series:</b>	F28 MK100 F28 MK100	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	11352
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	112
<b>Date/Type of Last Inspection:</b>	Continuous Airworthiness	<b>Certified Max Gross Wt.:</b>	91500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo Fan
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Rolls-Royce
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TAY650-15
<b>Registered Owner:</b>	AMERICAN AIRLINES, INC.	<b>Rated Power:</b>	15100 lbs
<b>Operator:</b>	AMERICAN AIRLINES, INC.	<b>Air Carrier Operating Certificate:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	AMERICAN AIRLINES	<b>Operator Designator Code:</b>	AALA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	ORD, 668 ft msl	Observation Time:	1756 CST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Temperature/Dew Point:	7° C / 2° C
Lowest Ceiling:	Broken / 20000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	13 knots/ 20 knots, 190°	Visibility (RVR):	0 ft
Altimeter Setting:	30 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	ROCHESTER, MN (RST)	Type of Flight Plan Filed:	IFR
Destination:	(ORD)	Type of Clearance:	IFR
Departure Time:	1643 CST	Type of Airspace:	Class B

## Airport Information

Airport:	O'HARE INT'L AIRPORT (ORD)	Runway Surface Type:	
Airport Elevation:	668 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	2 Minor, 3 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 Minor, 43 None	Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 6 Minor, 46 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	PAMELA S SULLIVAN	Adopted Date:	03/02/2001
Additional Participating Persons:	DAVE DILLON; SCHILLER PARK, IL JOHN DARBO; DFW, TX		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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