



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	SCOTTSDALE, Arizona	Accident Number:	LAX99LA127
Date & Time:	March 21, 1999, 17:25 Local	Registration:	N4188E
Aircraft:	Piper PA-28-181	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

A Piper PA-28-181, and a Rockwell NA-265-80, Sabreliner, collided on a taxiway parallel to the runway while taxiing to their respective parking locations. Both aircraft had just landed on runway 21 and were in contact with the ATCT. The Piper was issued a clearance to taxi by the ground controller, and the Sabreliner had turned off the runway and was issued a taxi clearance by the local controller. The Piper exited the runway at taxiway A11, and contacted ground control. A taxi clearance was issued by the controller to proceed southbound on taxiway alpha to parking. The controller did not advise the pilot of any traffic entering the taxiway from the runway. At the time the ground controller issued the taxi clearance to the Piper, the Sabreliner was given a landing clearance by the local controller. The Sabreliner slowed and was preparing to turn off the runway at A7; however, the local controller inquired where the aircraft was parking and subsequently told the crew to taxi forward on the runway, turn off at A5 and taxi to parking, and to monitor ground. As the pilot of The Piper approached the intersection of A5, she observed the Sabreliner exiting runway 21 and continued taxiing because it appeared that the Sabreliner was stopping and no other instructions were issued by the ground controller. When the Piper reached the intersection she realized the Sabreliner wasn't stopping and attempted to turn right and avoid the aircraft. The left wing of the Piper struck the forward avionics bay of the Sabreliner. The local controller did not advise the crew of the Sabreliner of any traffic on the taxiway. The crew said they turned off runway 21 on A5 and the first officer was looking down at the pedestal changing radio frequencies just as they crossed the hold bars. The crew reported that they did not see the Piper on taxiway alpha. Review of the air-to-ground communications tapes disclosed that neither of the controllers issued traffic information or hold short instructions to either aircraft. FAA Order 7110.65 specifically states that local controllers and ground controllers shall exchange information as necessary for the safe and efficient use of airport runways and movement areas. Local controllers and ground controllers shall protect any runway/taxiway/ramp intersection if an aircraft is required to enter that intersection to clear the landing runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The failure of the local and ground controller to coordinate the clearances of both aircraft and to maintain separation of the traffic in the taxiway movement area.

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)

Phase of Operation: TAXI - FROM LANDING

Findings

1. LIGHT CONDITION - DAYLIGHT
2. OBJECT - AIRCRAFT MOVING ON GROUND
3. (C) ATC CLEARANCE - INADEQUATE - ATC PERSONNEL(LCL/GND/CLNC)
4. (C) TRAFFIC ADVISORY - NOT ISSUED - ATC PERSONNEL(LCL/GND/CLNC)

Factual Information

On March 21, 1999, at 1725 hours mountain standard time, a Piper PA-28-181, N4188E, and a Rockwell International NA-265-80, N818DW, collided on taxiway alpha while taxiing to their respective parking locations at the Scottsdale, Arizona, airport. Both aircraft had just landed on runway 21 and were in contact with the Scottsdale Federal Aviation Administration (FAA) Air Traffic Control Tower. The Piper PA-28-181 was issued a clearance to taxi by the ground controller, and the Rockwell NA-265-80 had turned off the runway and was issued a taxi clearance by the local controller. Visual meteorological conditions prevailed at the time. The Piper PA-28-181 was owned and operated by Sabena Airline Training Center of Scottsdale as a local area solo instructional flight, which originated at the Scottsdale airport about 1615. The Rockwell NA-265-80 was owned and operated by DW Holdings, LLC, of Sparta, New Jersey, and was concluding a cross-country corporate flight, which originated from Kansas City, Kansas, at 1723 central standard time. An IFR flight plan was filed for the Rockwell's flight and no flight plan was on file for the Piper. Both aircraft were operating under 14 CFR Part 91 of the Federal Aviation Regulations. The Piper PA-28-181 sustained substantial damage and the student pilot, the sole occupant, was not injured. The Rockwell NA-265-80 sustained minor damage and neither the airline transport pilot captain, the commercial pilot first officer, nor the three passengers were injured.

The student pilot of N4188E reported that she landed on runway 21, exited at taxiway A11, and contacted ground control. A taxi clearance was issued by the controller to proceed southbound on taxiway alpha to parking. The controller did not advise her of any traffic entering the taxiway. As she approached the intersection of A5, she observed a Sabreliner exiting runway 21. She stated that she continued taxiing because it appeared that the Sabreliner was stopping, and the ground controller issued no other instructions to her. When N4188E reached the intersection of taxiway alpha and A5, the pilot realized the Sabreliner wasn't stopping and attempted to turn right and avoid the aircraft. The left wing of the Piper PA-28 struck the forward avionics bay of N818DW and became entangled in the structure. The Piper-28 was shoved 180 degrees to the left and the left wing was torn off as the Sabreliner moved forward. The fuel lines from both fuel tanks of the Piper PA-28 were severed resulting in a fuel spill on the taxiway. The pilot shut the aircraft off immediately.

The crew of N818DW stated they landed on runway 21 and slowed to turn off at A7. The local controller then asked them their parking intentions. Following the crew's response, the local controller instructed them to taxi forward on the runway, turn right on A5, taxi to the ramp, and monitor the ground control frequency. The controller did not advise the crew of any traffic on the taxiway. The crew said they turned off runway 21 on A5, and the first officer was looking down at the pedestal changing radio frequencies just as they crossed the hold bars. The crew reported that they did not see the Piper PA-28 on taxiway alpha. The crew of N818DW informed the ground controller of the accident and requested to taxi clear of the area. The

ground controller instructed N818DW to taxi to its respective parking area.

After review of the control tower frequency voice recordings and controller statements, N4188E was issued a taxi clearance for parking by ground control at 1722. N818DW was issued a landing clearance for runway 21 at 1722 and a taxi clearance for parking at 1723 by local control. According to the local controller's statement, they coordinated with the ground controller to taxi N818DW for parking prior to issuing the taxi clearance. At 1724, N818DW informed ground control that their nose was struck by the wing of N4188E. There is no indication on the tower frequency voice recordings that the controllers issued traffic information or hold short instructions to the aircraft they were in communications with. Federal Aviation Administration Order 7110.65 specifically states that local controllers and ground controllers shall exchange information as necessary for the safe and efficient use of airport runways and movement areas. Local controllers and ground controllers shall protect any runway/taxiway/ramp intersection if an aircraft is required to enter that intersection to clear the landing runway.

Pilot Information

Certificate:	Student	Age:	25,Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 7, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	66 hours (Total, all aircraft), 53 hours (Total, this make and model), 4 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N4188E
Model/Series:	PA-28-181 PA-28-181	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-43212
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 13, 1999 AAIP	Certified Max Gross Wt.:	2558 lbs
Time Since Last Inspection:	46 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	192 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A4M
Registered Owner:	SABENA AIRLINE TRAINING CENTER	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SDL ,1508 ft msl	Distance from Accident Site:	
Observation Time:	17:25 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29°C / -9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(SDL)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	16:15 Local	Type of Airspace:	Class D

Airport Information

Airport:	SCOTTSDALE AIRPORT SDL	Runway Surface Type:	Asphalt
Airport Elevation:	1508 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	8251 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.609119,-111.890365(est)

Administrative Information

Investigator In Charge (IIC): RICH, JEFF

Additional Participating Persons: LYLE ALEXANDER; SCOTTSDALE , AZ

Original Publish Date: August 16, 2001

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=45950>

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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Aviation Investigation Final Report

Location:	SCOTTSDALE, Arizona	Accident Number:	LAX99LA127
Date & Time:	March 21, 1999, 17:25 Local	Registration:	N818DW
Aircraft:	Rockwell NA-265-80	Aircraft Damage:	Minor
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

A Piper PA-28-181, and a Rockwell NA-265-80, Sabreliner, collided on a taxiway parallel to the runway while taxiing to their respective parking locations. Both aircraft had just landed on runway 21 and were in contact with the ATCT. The Piper was issued a clearance to taxi by the ground controller, and the Sabreliner had turned off the runway and was issued a taxi clearance by the local controller. The Piper exited the runway at taxiway A11, and contacted ground control. A taxi clearance was issued by the controller to proceed southbound on taxiway alpha to parking. The controller did not advise the pilot of any traffic entering the taxiway from the runway. At the time the ground controller issued the taxi clearance to the Piper, the Sabreliner was given a landing clearance by the local controller. The Sabreliner slowed and was preparing to turn off the runway at A7; however, the local controller inquired where the aircraft was parking and subsequently told the crew to taxi forward on the runway, turn off at A5 and taxi to parking, and to monitor ground. As the pilot of The Piper approached the intersection of A5, she observed the Sabreliner exiting runway 21 and continued taxiing because it appeared that the Sabreliner was stopping and no other instructions were issued by the ground controller. When the Piper reached the intersection she realized the Sabreliner wasn't stopping and attempted to turn right and avoid the aircraft. The left wing of the Piper struck the forward avionics bay of the Sabreliner. The local controller did not advise the crew of the Sabreliner of any traffic on the taxiway. The crew said they turned off runway 21 on A5 and the first officer was looking down at the pedestal changing radio frequencies just as they crossed the hold bars. The crew reported that they did not see the Piper on taxiway alpha. Review of the air-to-ground communications tapes disclosed that neither of the controllers issued traffic information or hold short instructions to either aircraft. FAA Order 7110.65 specifically states that local controllers and ground controllers shall exchange information as necessary for the safe and efficient use of airport runways and movement areas. Local controllers and ground controllers shall protect any runway/taxiway/ramp intersection if an aircraft is required to enter that intersection to clear the landing runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The failure of the local and ground controller to coordinate the clearances of both aircraft and to maintain separation of the traffic in the taxiway movement area.

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)

Phase of Operation: TAXI - FROM LANDING

Findings

1. LIGHT CONDITION - DAYLIGHT
2. OBJECT - AIRCRAFT MOVING ON GROUND
3. (C) ATC CLEARANCE - INADEQUATE - ATC PERSONNEL(LCL/GND/CLNC)
4. (C) TRAFFIC ADVISORY - NOT ISSUED - ATC PERSONNEL(LCL/GND/CLNC)

Factual Information

SEE NARRATIVE FOR LAX99LA127A

Pilot Information

Certificate:	Airline transport	Age:	50,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--w/ waivers/lim	Last FAA Medical Exam:	December 1, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4396 hours (Total, all aircraft), 2984 hours (Total, this make and model), 3316 hours (Pilot In Command, all aircraft), 99 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N818DW
Model/Series:	NA-265-80 NA-265-80	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	380-030
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	November 6, 1999 AAIP	Certified Max Gross Wt.:	23000 lbs
Time Since Last Inspection:	96 Hrs	Engines:	2 Turbo fan
Airframe Total Time:	8179 Hrs	Engine Manufacturer:	GE
ELT:		Engine Model/Series:	CF700-2D2
Registered Owner:	DW HOLDINGS, LLC	Rated Power:	4500 Lbs thrust
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SDL ,1508 ft msl	Distance from Accident Site:	
Observation Time:	17:25 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29°C / -9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KANSAS CITY (MKC)	Type of Flight Plan Filed:	IFR
Destination:	(SDL)	Type of Clearance:	IFR
Departure Time:	15:48 Local	Type of Airspace:	Class D

Airport Information

Airport:	SCOTTSDALE AIRPORT SDL	Runway Surface Type:	Asphalt
Airport Elevation:	1508 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	8251 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Minor
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	33.609119,-111.890365(est)

Administrative Information

Investigator In Charge (IIC): RICH, JEFF

Additional Participating Persons: LYLE ALEXANDER; SCOTTSDALE , AZ

Original Publish Date: August 16, 2001

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=45950>

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