



Aviation Investigation Final Report

Location:	Teterboro, New Jersey	Incident Number:	OPS071A005
Date & Time:	June 17, 2007, 13:20 Local	Registration:	N152SL
Aircraft:	Piaggio Industrie P180	Aircraft Damage:	Minor
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

On June 17, 2007, at 1720 Coordinated Universal Time, 1320 Eastern daylight time, Avantair (VRN) flight 152, a Piaggio P180 and N6026K, a Cirrus SR-22, nearly collided in the intersection of runways 19 and 24 at Teterboro Airport (TEB), Teterboro, New Jersey. VRN152 was operating under 14 CFR Part 135 as a domestic non-scheduled on-demand air taxi on an instrument flight plan destined for Martin State Airport, Baltimore, Maryland (MTN). VRN152 was not carrying passengers at the time. N6026K was operating under 14 CFR Part 91 and was on a visual flight rules flight plan. There were no injuries reported to any of the crew or passengers on either aircraft. VRN152 reported no damage to the aircraft; however, the tires, wheels and brake assemblies had to be replaced post incident. There was no damage to N6026K.

VRN152 was assigned transponder code 7153; N6062K was assigned transponder code 0330.

At 1719:02, VRN152 transmitted to the Teterboro tower controller, "and Avantair one five two is ready ah for [runway] two four." The tower controller replied, "Avantair one five two, runway two four, cleared for takeoff." The pilot acknowledged the clearance. VRN152 departed from the approach end of runway 24.

At 1719:42, the pilot of N6026K transmitted to the same tower controller and said, "n two six kilo is ready to go [on runway 19] at [taxiway] bravo." The tower controller replied, "Cirrus two six kilo left turn northeast bound maintain at or below one thousand, runway one niner cleared for takeoff." The pilot responded, "ok left turn northeast bound and at or below one thousand

ah cleared to go two kilo six." At 1720:28, N6026K transmitted, "and two six kilo we have an open door we're just gonna stop here for one second if that's possible." The tower controller did not acknowledge this transmission.

During the following 18 seconds, according to the VRN152 pilot's statement, the pilot of VRN152 observed N6026K on a potential collision course and applied maximum braking and retarded engine power. The ground speed of VRN152 was approximately 106 knots. With the brakes locked up, and as the two aircraft approached one another, the pilot of VRN152 applied right rudder in an attempt to minimize the impact and hit N6026K in the tail section vice a direct broadside hit at the wings. The pilot of VRN152 stated that his aircraft passed "what seemed like just feet behind the Cirrus and it took a few moments" for the pilot to realize he had not collided with the Cirrus. VRN152 continued down runway 24, where the pilot was able to maintain directional control until the tail slid out and the aircraft slid, coming to a stop approximately 3800 feet from the approach end of the runway, facing approximately on a north heading.

The pilot of N6026K recalled crossing the runway 24 intersection with 40 to 50 knots of airspeed indicated, noticed an aircraft off to his right and as he looked further, noticed it was in full braking mode and beginning to turn sideways on the runway. At this point, the pilot of N6026K was committed to his own departure and followed through with rotation. N6026K did not recall whether he slowed down or came to a complete stop during this departure evolution.

The tower controller stated he was distracted and did not observe the event, therefore he did not cancel the takeoff clearance to either aircraft; however, a comment he made alerted the other controllers in the tower cab to observe the incident.

At 1720:46, Teterboro tower transmitted "avantair one fifty two you you alright." At 1720:48, VRN 152 responded "yeah we're fine."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The TEB tower local controller's failure to ensure separation between two aircraft departing on intersecting runways.

Findings

Occurrence #1: NEAR COLLISION BETWEEN AIRCRAFT
Phase of Operation: TAKEOFF - ABORTED

Findings

1. (C) CONTROL TOWER - IMPROPER

Factual Information

On June 17, 2007, at 1720 Coordinated Universal Time, 1320 Eastern daylight time, Avantair (VRN) flight 152, a Piaggio P180 and N6026K, a Cirrus SR-22, nearly collided in the intersection of runways 19 and 24 at Teterboro Airport (TEB), Teterboro, New Jersey. VRN152 was operating under 14 CFR Part 135 as a domestic non-scheduled on-demand air taxi on an instrument flight plan destined for Martin State Airport, Baltimore, Maryland (MTN). VRN152 was not carrying passengers at the time. N6026K was operating under 14 CFR Part 91 and was on a visual flight rules flight plan. There were no injuries reported to any of the crew or passengers on either aircraft. VRN152 reported no damage to the aircraft; however, the tires, wheels and brake assemblies had to be replaced post incident. There was no damage to N6026K.

VRN152 was assigned transponder code 7153; N6062K was assigned transponder code 0330.

At 1719:02, VRN152 transmitted to the Teterboro tower controller, "and Avantair one five two is ready ah for [runway] two four." The tower controller replied, "Avantair one five two, runway two four, cleared for takeoff." The pilot acknowledged the clearance. VRN152 departed from the approach end of runway 24.

At 1719:42, the pilot of N6026K transmitted to the same tower controller and said, "n two six kilo is ready to go [on runway 19] at [taxiway] bravo." The tower controller replied, "Cirrus two six kilo left turn northeast bound maintain at or below one thousand, runway one niner cleared for takeoff." The pilot responded, "ok left turn northeast bound and at or below one thousand ah cleared to go two kilo six." At 1720:28, N6026K transmitted, "and two six kilo we have an open door we're just gonna stop here for one second if that's possible." The tower controller did not acknowledge this transmission.

During the following 18 seconds, according to the VRN152 pilot's statement, the pilot of VRN152 observed N6026K on a potential collision course and applied maximum braking and retarded engine power. The ground speed of VRN152 was approximately 106 knots. With the brakes locked up, and as the two aircraft approached one another, the pilot of VRN152 applied right rudder in an attempt to minimize the impact and hit N6026K in the tail section vice a direct broadside hit at the wings. The pilot of VRN152 stated that his aircraft passed "what seemed like just feet behind the Cirrus and it took a few moments" for the pilot to realize he had not collided with the Cirrus. VRN152 continued down runway 24, where the pilot was able to maintain directional control until the tail slid out and the aircraft slid, coming to a stop approximately 3800 feet from the approach end of the runway, facing approximately on a north heading.

The pilot of N6026K recalled crossing the runway 24 intersection with 40 to 50 knots of

airspeed indicated, noticed an aircraft off to his right and as he looked further, noticed it was in full braking mode and beginning to turn sideways on the runway. At this point, the pilot of N6026K was committed to his own departure and followed through with rotation. N6026K did not recall whether he slowed down or came to a complete stop during this departure evolution.

The tower controller stated he was distracted and did not observe the event, therefore he did not cancel the takeoff clearance to either aircraft; however, a comment he made alerted the other controllers in the tower cab to observe the incident.

At 1720:46, Teterboro tower transmitted "avantair one fifty two you you alright." At 1720:48, VRN 152 responded "yeah we're fine."

PERSONNEL INFORMATION

The crew of VRN152 consisted of a pilot and a co-pilot. The co-pilot was at the controls during the aborted takeoff. N6026K was operated by a single pilot. The tower controller was employed by the FAA from 1976 to 1981 and rehired in 1998. He was fully certified at TEB from 1998 to 2005, transferred to New York Terminal Radar Approach Control and returned to TEB in 2006 where he re-certified as a certified tower controller and became controller-in charge qualified on all positions.

METEOROLOGICAL INFORMATION

At 1333 EDT/1733 UTC, the TEB special weather observation was wind 280 at 9 knots, visibility 10 miles, sky clear, temperature 30, dew point 13, altimeter 29.88 inches. The runways were dry.

WRECKAGE AND IMPACT INFORMATION

The tires, wheel and brake assemblies were replaced on VRN152 and there was no damage reported to N6026K.

ADDITIONAL INFORMATION

Air Traffic Control Information

TEB Air Traffic Control Tower (ATCT) was an ATC-7 level facility responsible for aircraft operations on the airport surface and in the Class D airspace in the immediate vicinity of the airport. The Class D underlies Newark's Class B airspace. The tower does not have an airport surface area movement monitoring system such as Airport Movement Area safety System (AMASS). On the day of the incident, the front line manager was scheduled to work from 0800-1600 however, he took the day off because he worked a shift on Saturday to arrange for the replacement of two tower glass windows. However, the contractors failed to show up for

the tower glass window replacement, hence the windows were replaced on Saturday.

ATCT staffing at the time of the incident included three facility rated certified professional controllers (CPC), a qualified ground/clearance delivery controller and an unqualified clearance delivery trainee. The ground controller was conducting on the job training for the clearance delivery trainee on the clearance delivery position. The local controller was working the local control, ground control, CIC, arrival radar, cab coordinator, and traffic management position combined. The two other CPC's were on break outside of the tower cab.

Airport Information

Teterboro Airport serves general aviation aircraft. The annual air activity averages 200,000 operations per year. The airport is configured with two intersecting runways, runway 1/19 which was 7000 feet by 150 feet and 6/24 which was 6013 feet by 150 feet. The two runways intersect 1800 feet from the approach end of runway 24 and approximately 1000 feet from the approach end of runway 19. Taxiway B, the departure point for N6026K, was 850 feet from the intersection.

Pilot Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed: No
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Piaggio Industrie	Registration:	N152SL
Model/Series:	P180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
Operator:	Avantair	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	VRN

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	
Observation Facility, Elevation:	TEB	Distance from Accident Site:	
Observation Time:	12:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	29°C / 13°C
Precipitation and Obscuration:			
Departure Point:	Teterboro, NJ (TEB)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	2 None	Latitude, Longitude:	40.849998,-74.060836

Administrative Information

Investigator In Charge (IIC):	Bartlett, Daniel
Additional Participating Persons:	Mary Kate Strawbridge; HQ
Original Publish Date:	November 30, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this incident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66003

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](#).



Aviation Investigation Final Report

Location:	Teterboro, New Jersey	Incident Number:	OPS071A005
Date & Time:	June 17, 2007, 13:20 Local	Registration:	N6026K
Aircraft:	Cirrus Design Corp. SR-22	Aircraft Damage:	None
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

On June 17, 2007, at 1320 EDT (1720 UTC), a runway incursion occurred at Teterboro Airport (TEB), New Jersey involving Avantair (VRN) flight 152, a P180, and N6026K, an SR22.

AT 1319:02, the pilot of VRN152, an IFR departure, advised the tower controller that they were ready to depart from runway 24. The tower controller responded, 'Avantair one five two, runway 24, cleared for takeoff.'

At 1319:42, the pilot of N6026K, a VFR departure, advised the tower controller that he was 'ready to go [on runway 19] at [taxiway] bravo.' The tower controller responded, 'Cirrus two six kilo left turn northeast bound maintain at or below one thousand runway 19 at bravo cleared for takeoff.'

The pilot of VRN152 saw N6026K on departure roll and applied maximum braking, experienced two blown tires on the main gear, as N6026K rolled past, through the intersection 50 feet in front. VRN152 stopped in the intersection. The tower controller stated that he did not see the incursion, so he did not cancel either takeoff clearance.

There were 3 people in the tower cab; the tower/controller-in charge and two developmental controllers who were working clearance delivery, one controller was on break. The two developmental controllers were faced away from the front of the cab and did not see the

event.

The incident occurred during day VFR conditions (clear sky with 10 miles visibility).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be:
The TEB local controller's failure to ensure separation between two aircraft departing intersecting runways.

Findings

Occurrence #1: NEAR COLLISION BETWEEN AIRCRAFT
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) CONTROL TOWER - IMPROPER

Factual Information

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Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Cirrus Design Corp.	Registration:	N6026K
Model/Series:	SR-22	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
Operator:	CIRRUS EXCHANGE LLC	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	
Observation Facility, Elevation:	TEB	Distance from Accident Site:	
Observation Time:	12:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	29°C / 13°C
Precipitation and Obscuration:			
Departure Point:	Teterboro, NJ (TEB)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	40.849998,-74.060836

Administrative Information

Investigator In Charge (IIC):	Bartlett, Daniel
Additional Participating Persons:	Mary Kate Strawbridge; HQ
Original Publish Date:	November 30, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this incident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66003

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