



Aviation Investigation Final Report

Location:	EASTON, Maryland	Accident Number:	IAD99LA022
Date & Time:	November 28, 1998, 11:19 Local	Registration:	N340PS
Aircraft:	Pitts S-2B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The commercially rated student pilot, who was training for a tailwheel endorsement and checkout in the aircraft, was occupying the rear seat of the Pitts. The commercially rated pilot-in-command, a flight instructor, was occupying the forward seat of the Pitts. After arriving in the pattern and conducting several touch-and-go landings on runway 22, the student pilot initiated another approach as he was passing slightly downwind of the abeam position. The instructor reported making a radio call announcing 'Pitts turning base' and then, midway through the base turn, reported hearing a radio transmission from a Cessna aircraft in the pattern which was following the Pitts. Both the student and instructor reported that on final approach, the Pitts was flared for landing during which the aircraft collided with a Cessna 152 which had just landed and was preparing to clear the runway at the first taxiway. Both the student and instructor reported that they did not see the Cessna during their approach. The pilot of the Cessna following the Pitts in the pattern reported hearing the Cessna 152 call base on the airport's Unicom frequency, and described the conditions as clear and sunny.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of both the pilot-in-command (CFI) and dual student to maintain adequate visual lookout.

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND(CFI)
2. (C) VISUAL LOOKOUT - INADEQUATE - DUAL STUDENT

Factual Information

On November 28, 1998, approximately 1119 eastern standard time, a Pitts S-2B, N340PS, and a Cessna 152, N5088Q, were substantially damaged during a ground collision on runway 22 at the Newnam Field airport, Easton, Maryland. The Pitts was being flown from the rear seat by a student pilot (SP) who was accompanied by a flight instructor (FI) occupying the forward seat. Both commercial pilots were uninjured. The Cessna was being flown from the left seat by a private pilot (PP) accompanied by a passenger. The pilot and passenger sustained minor and serious injuries respectively. Visual meteorological conditions prevailed and a flight plan was not filed for either aircraft. The Pitts had departed Annapolis, Maryland, approximately 1030, and was conducting practice landings at Newnam Field. The Cessna had departed Stevensville, Maryland, approximately 1100 destined for Newnam Field.

The FI stated that the planned flight included practice landings at Newnam Field in anticipation of a pre-solo checkout for the commercially rated SP, and that "Results of the flights would determine whether a final checkout was going to be given to... [the SP] ...for solo of Pitts and Christen Eagle Aircraft." He also stated that the SP was "...flying rear seat with the understanding that he was piloting the aircraft and that I was assuming the role of a passenger."

The FI reported that following the fourth departure, the Pitts was established on downwind and the FI "then remarked to keep an eye on the aircraft at our 1 o'clock position." This aircraft was described as being 12,000 to 15,000 feet distant and climbing northbound. The FI further reported that "absent of any radio communications from any aircraft, we announced 'Pitts turning base for runway 22 at Easton, doing a touch and go.' Midway through our base leg there was a transmission, as I recall that said 'Cessna turning downwind to base, Easton, runway 22. I immediately responded that the Pitts was on base...'"

The FI described the approach as turning base to final at 500 feet and approximately 1,500 to 2,000 feet from the approach end of the runway. Power was adjusted, the aircraft was flared, and airspeed was allowed to bleed off. The FI reported that "suddenly, I saw a white wing in my sight off the right side of the nose of the aircraft. We hit immediately before any evasive action could be taken." The FI also stated that "at no time did we hear any radio transmission from the aircraft we collided with or did we observe it on the final approach path when we were on downwind or base leg" (refer to attached NTSB Form 6120.1/2 and STATEMENT FI-I).

The SP stated that "I required training from... [the IP] ...so that I could obtain a logbook endorsement to operate tailwheel aircraft and also to become familiar with the operating characteristics of Pitts type aircraft." The SP reported that several landings were made on runway 22 and recalled "at least one other aircraft in the traffic pattern made a position report while we were in the landing pattern setting up for the accident landing." He further stated that

on the accident landing "a left turn to base leg was made slightly past a position opposite the approach end of runway 22" and that the IP "...transmitted our position on the Unicom frequency." He further reported that "a wings level base leg was flown. I distinctly recall looking left for aircraft approaching the runway, as well as checking to see if the runway was clear, and I also looked to the right for aircraft on final. I did not see any aircraft."

The SP continued reporting that "as we became established on final for runway 22, I did not see any aircraft in front of the Pitts S-2B or on the runway. Upon reaching the point where a normal flare for landing is commenced, the power was reduced to idle and the flare maneuver commenced. While in the flare, the white wing of a Cessna suddenly appeared out of the right side of the canopy" (refer to attached NTSB Form 6120.1/2 and STATEMENT SP-I).

The pilot of the Cessna (PP) was interviewed by an inspector from the Federal Aviation Administration's (FAA) Baltimore Flight Standards District Office (FSDO) and reported that he had just landed on runway 22 with the intention of exiting at the first taxiway. He reported that he was decelerating to about 10 miles per hour when his aircraft was impacted from behind (refer to attached STATEMENTS PP-I and PP-II).

A private pilot, who was interviewed by an inspector from the FAA's Baltimore FSDO, reported that while he was awaiting departure from runway 22 he witnessed the approaching aircraft and subsequent accident. He reported that he "saw a Cessna turning base where most people turn base, over the golf course. He turns final and, about the time he gets to short final, here comes this Pitts on a very close base." The witness further described the Pitts' location reporting that "when he was on base, he was headed towards the traffic lights on route fifty." He also reported that "when he [the Pitts] turned final, the Cessna was in front of him, probably just landing and just to the right of him" (refer to STATEMENT W-I and CHART I).

A commercial flight instructor, who was interviewed by an inspector from the FAA's Baltimore FSDO, reported that "as we departed runway 22 and joined the downwind leg, we heard 88Q [the Cessna] call base, and observed the aircraft during this time, extending our downwind slightly to give proper spacing. At no time since departing the runway did we see the Pitts in the pattern." The instructor and his student subsequently heard a radio transmission of the accident and executed a go-around (refer to STATEMENT W-II).

A third witness working in the airport's terminal building, and who was interviewed by an inspector from the FAA's Baltimore FSDO, reported observing the Cessna 152 land on runway 22. She reported that the Pitts then came by "fast and low" and the Pitts hit the Cessna. In a subsequent interview with the same inspector, she recalled "hearing the Cessna's [sic] broadcast and was asked 'Do you recall hearing the Pitts making any radio transmissions?' She responded 'No, I don't'" (refer to STATEMENT W-III(a) and (b)).

A flight instructor who witnessed the accident reported the environmental conditions as "clear, sunny" and further stated that "both occupants were wearing headsets that I observed during one of their landings."

The aircraft collided near the centerline of runway 22 and approximately 200 feet short of the first taxiway exit to the ramp area (refer to CHART I and DIAGRAM I).

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	61, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	September 28, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6199 hours (Total, all aircraft), 4000 hours (Total, this make and model), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pitts	Registration:	N340PS
Model/Series:	S-2B S-2B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	5338
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	November 9, 1998 100 hour	Certified Max Gross Wt.:	1700 lbs
Time Since Last Inspection:	74 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	189 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	AEIO-540-D4A5
Registered Owner:	DENT AIR INC	Rated Power:	260 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:	SBY ,52 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	146°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ANNAPOLIS , MD (ANP)	Type of Flight Plan Filed:	None
Destination:	(ESN)	Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	EASTON/NEWNAM FIELD ESN	Runway Surface Type:	Asphalt
Airport Elevation:	74 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	5511 ft / 100 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

Wreckage and Impact Information

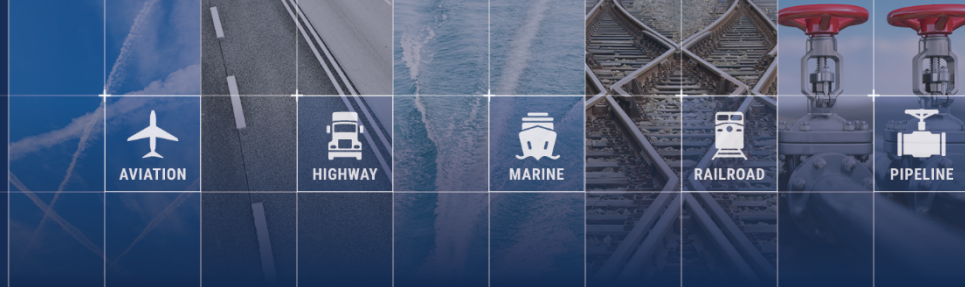
Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.769161,-76.060661(est)

Administrative Information

Investigator In Charge (IIC):	DRAKE, BEVERLEY
Additional Participating Persons:	FRANK S PHILLIPS; BALTIMORE , MD
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45419

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:	EASTON, Maryland	Accident Number:	IAD99LA022
Date & Time:	November 28, 1998, 11:19 Local	Registration:	N5088Q
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercially rated student pilot, who was training for a tailwheel endorsement and checkout in the aircraft, was occupying the rear seat of the Pitts. The commercially rated pilot-in-command, a flight instructor, was occupying the forward seat of the Pitts. After arriving in the pattern and conducting several touch-and-go landings on runway 22, the student pilot initiated another approach as he was passing slightly downwind of the abeam position. The instructor reported making a radio call announcing 'Pitts turning base' and then, midway through the base turn, reported hearing a radio transmission from a Cessna aircraft in the pattern which was following the Pitts. Both the student and instructor reported that on final approach, the Pitts was flared for landing during which the aircraft collided with a Cessna 152 which had just landed and was preparing to clear the runway at the first taxiway. Both the student and instructor reported that they did not see the Cessna during their approach. The pilot of the Cessna following the Pitts in the pattern reported hearing the Cessna 152 call base on the airport's Unicom frequency, and described the conditions as clear and sunny.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of both the pilot-in-command (CFI) and dual student of the other aircraft (Pitts) to maintain adequate visual lookout.

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)
Phase of Operation: LANDING - ROLL

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT

Factual Information

On November 28, 1998, approximately 1119 eastern standard time, a Pitts S-2B, N340PS, and a Cessna 152, N5088Q, were substantially damaged during a ground collision on runway 22 at the Newnam Field airport, Easton, Maryland. The Pitts was being flown from the rear seat by a student pilot (SP) who was accompanied by a flight instructor (FI) occupying the forward seat. Both commercial pilots were uninjured. The Cessna was being flown from the left seat by a private pilot (PP) accompanied by a passenger. The pilot and passenger sustained minor and serious injuries respectively. Visual meteorological conditions prevailed and a flight plan was not filed for either aircraft. The Pitts had departed Annapolis, Maryland, approximately 1030, and was conducting practice landings at Newnam Field. The Cessna had departed Stevensville, Maryland, approximately 1100 destined for Newnam Field.

The FI stated that the planned flight included practice landings at Newnam Field in anticipation of a pre-solo checkout for the commercially rated SP, and that "Results of the flights would determine whether a final checkout was going to be given to... [the SP] ...for solo of Pitts and Christen Eagle Aircraft." He also stated that the SP was "...flying rear seat with the understanding that he was piloting the aircraft and that I was assuming the role of a passenger."

The FI reported that following the fourth departure, the Pitts was established on downwind and the FI "then remarked to keep an eye on the aircraft at our 1 o'clock position." This aircraft was described as being 12,000 to 15,000 feet distant and climbing northbound. The FI further reported that "absent of any radio communications from any aircraft, we announced 'Pitts turning base for runway 22 at Easton, doing a touch and go.' Midway through our base leg there was a transmission, as I recall that said 'Cessna turning downwind to base, Easton, runway 22. I immediately responded that the Pitts was on base...'"

The FI described the approach as turning base to final at 500 feet and approximately 1,500 to 2,000 feet from the approach end of the runway. Power was adjusted, the aircraft was flared, and airspeed was allowed to bleed off. The FI reported that "suddenly, I saw a white wing in my sight off the right side of the nose of the aircraft. We hit immediately before any evasive action could be taken." The FI also stated that "at no time did we hear any radio transmission from the aircraft we collided with or did we observe it on the final approach path when we were on downwind or base leg" (refer to attached NTSB Form 6120.1/2 and STATEMENT FI-I).

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on the accident landing "a left turn to base leg was made slightly past a position opposite the approach end of runway 22" and that the IP "...transmitted our position on the Unicom frequency." He further reported that "a wings level base leg was flown. I distinctly recall looking left for aircraft approaching the runway, as well as checking to see if the runway was clear, and I also looked to the right for aircraft on final. I did not see any aircraft."

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The pilot of the Cessna (PP) was interviewed by an inspector from the Federal Aviation Administration's (FAA) Baltimore Flight Standards District Office (FSDO) and reported that he had just landed on runway 22 with the intention of exiting at the first taxiway. He reported that he was decelerating to about 10 miles per hour when his aircraft was impacted from behind (refer to attached STATEMENTS PP-I and PP-II).

A private pilot, who was interviewed by an inspector from the FAA's Baltimore FSDO, reported that while he was awaiting departure from runway 22 he witnessed the approaching aircraft and subsequent accident. He reported that he "saw a Cessna turning base where most people turn base, over the golf course. He turns final and, about the time he gets to short final, here comes this Pitts on a very close base." The witness further described the Pitts' location reporting that "when he was on base, he was headed towards the traffic lights on route fifty." He also reported that "when he [the Pitts] turned final, the Cessna was in front of him, probably just landing and just to the right of him" (refer to STATEMENT W-I and CHART I).

A commercial flight instructor, who was interviewed by an inspector from the FAA's Baltimore FSDO, reported that "as we departed runway 22 and joined the downwind leg, we heard 88Q [the Cessna] call base, and observed the aircraft during this time, extending our downwind slightly to give proper spacing. At no time since departing the runway did we see the Pitts in the pattern." The instructor and his student subsequently heard a radio transmission of the accident and executed a go-around (refer to STATEMENT W-II).

A third witness working in the airport's terminal building, and who was interviewed by an inspector from the FAA's Baltimore FSDO, reported observing the Cessna 152 land on runway 22. She reported that the Pitts then came by "fast and low" and the Pitts hit the Cessna. In a subsequent interview with the same inspector, she recalled "hearing the Cessna's [sic] broadcast and was asked 'Do you recall hearing the Pitts making any radio transmissions?' She responded 'No, I don't'" (refer to STATEMENT W-III(a) and (b)).

A flight instructor who witnessed the accident reported the environmental conditions as "clear, sunny" and further stated that "both occupants were wearing headsets that I observed during one of their landings."

The aircraft collided near the centerline of runway 22 and approximately 200 feet short of the first taxiway exit to the ramp area (refer to CHART I and DIAGRAM I).

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	Single-engine land	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:	November 12, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	419 hours (Total, all aircraft), 62 hours (Total, this make and model), 380 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5088Q
Model/Series:	152 152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15285070
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 25, 1998 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6841 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-235
Registered Owner:	AERO SOURCE INC	Rated Power:	115 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:	SBY ,52 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	146°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	STEVENSVILLE , MD (W29)	Type of Flight Plan Filed:	None
Destination:	(ESN)	Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	EASTON/NEWNAM FIELD ESN	Runway Surface Type:	Asphalt
Airport Elevation:	74 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	5511 ft / 100 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	38.769161,-76.060661(est)

Administrative Information

Investigator In Charge (IIC):	DRAKE, BEVERLEY
Additional Participating Persons:	FRANK S PHILLIPS; BALTIMORE , MD
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45419

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