



Aviation Investigation Final Report

Location:	Battle Mountain, Nevada	Accident Number:	LAX08CA036
Date & Time:	December 7, 2007, 09:15 Local	Registration:	C-GPIA
Aircraft:	Piaggio Aero Industries S.P.A. Avanti P-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

During the landing roll, the flight crew engaged the nose wheel steering just below 60 knots indicated airspeed, and the airplane made an abrupt left turn. The crew attempted to correct the turn, but were unsuccessful. The airplane completed a 180-degree turn, and slid backwards down the runway before it departed the left side of the pavement. The right main landing gear collapsed after sinking in soft mud. The airplane sustained substantial damage to the right wing, right aileron, and the fuselage. Examination of the nose gear steering system, hydraulics, brakes, and rudder system by an FAA airworthiness inspector, and a representative from the airplane's manufacturer, found no mechanical anomalies. The Pilot's Operating Handbook (POH) states that "Steering engagement during landing is prohibited." The POH requires that the nose wheel steering be disengaged at or before 60 knots during the takeoff. During the interview with the pilots, they said they were unaware of the prohibition against engaging the nose wheel steering during landing. They noted that because the steering system is used up to 60 knots during takeoff, they assumed that the nose gear steering was to be engaged after touchdown during the landing roll, while slowing through 60 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight crew's failure to follow published procedures/directives in the Pilot's Operating Handbook during landing.

Findings

Factual Information

History of Flight

Pilot Information

Certificate:	Airline transport; Foreign	Age:	33, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	September 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 1, 2007
Flight Time:	5834 hours (Total, all aircraft), 773 hours (Total, this make and model), 4250 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Commercial	Age:	33, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	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 Without waivers/limitations	Last FAA Medical Exam:	May 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 1, 2007
Flight Time:	2465 hours (Total, all aircraft), 342 hours (Total, this make and model), 421 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piaggio Aero Industries S.P.A.	Registration:	C-GPIA
Model/Series:	Avanti P-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1072
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	November 1, 2007 Continuous airworthiness	Certified Max Gross Wt.:	11550 lbs
Time Since Last Inspection:	25 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	690 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT6A-66
Registered Owner:	I.M.P. Group Limited (Execaire)	Rated Power:	850 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	WMC,4308 ft msl	Distance from Accident Site:	46 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	300°
Lowest Cloud Condition:	Clear	Visibility	6 miles
Lowest Ceiling:	Overcast / 700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	RENO, NV (RNO)	Type of Flight Plan Filed:	IFR
Destination:	Battle Mountain, NV (BAM)	Type of Clearance:	IFR
Departure Time:	08:19 Local	Type of Airspace:	

Airport Information

Airport:	BATTLE MOUNTAIN BAM	Runway Surface Type:	Asphalt
Airport Elevation:	4532 ft msl	Runway Surface Condition:	Wet
Runway Used:	03	IFR Approach:	VOR/DME
Runway Length/Width:	7299 ft / 150 ft	VFR Approach/Landing:	None

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:	40.599998,-116.866668

Administrative Information

Investigator In Charge (IIC):	Jones, Patrick
Additional Participating Persons:	Harry R Smith; Federal Aviation Administration; Reno, NV
Original Publish Date:	February 28, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=67217

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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](#).