National Transportation Safety Board
Aviation Accident Final Report

Location:	Dunnellon, FL	**Accident Number:**	ANC05FA039
Date & Time:	03/02/2005, 1137 EST	**Registration:**	N444NM
Aircraft:	Piper PA-32-300	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot, with his adult son aboard, departed on a local area flight, with a return to the private fly-in community. After the initial climb, the pilot attempted to retard the throttle to a cruise power setting, but was unable to control the airplane's engine rpm with the throttle, and the engine rpm remained at takeoff power. He subsequently elected to return to the departure airport for an emergency landing. The airplane touched down with the engine still producing takeoff power, and the pilot decided to abort the landing. As the airplane began to climb, the engine rpm began to decrease and lose power, and the pilot selected an emergency landing area that contained 75-foot tall trees. The airplane collided with the trees, and sustained extensive damage to the wings, fuselage, and empennage. A postimpact fire ensued, with both the pilot and passenger trapped inside of the burning fuselage. The pilot's son was able to free the pilot before the airplane was consumed by fire. A postaccident engine examination revealed that the bolt that connects the throttle linkage to the fuel control arm was missing, and the throttle linkage was disconnected. According to an FAA airworthiness inspector who reviewed the accident airplane's maintenance logbooks, there was no entry in the logbook indicating that any maintenance or repairs had been conducted on the throttle linkage to the fuel control arm.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The improper installation of the bolt that connects the throttle linkage to the fuel control arm by an unknown maintenance person, which resulted in a loss of the bolt, a loss of engine rpm control, and subsequent forced landing and collision with trees.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CLIMB

Findings
1. (C) THROTTLE/POWER LEVER,LINKAGE - DISCONNECTED
2. (C) MAINTENANCE,INSTALLATION - INADEQUATE - UNKNOWN

Occurrence #2: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: LANDING - ABORTED

Occurrence #3: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
3. (F) OBJECT - TREE(S)

Factual Information

HISTORY OF FLIGHT

On March 2, 2005, about 1137 Eastern standard time, a Piper PA-32-300 airplane, N444NM, was destroyed by impact and postimpact fire after colliding with tree-covered terrain, about 8 miles southeast of Dunnellon, Florida. The airplane was being operated as a visual flight rules (VFR) local area personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The private pilot, and the sole passenger, sustained serious thermal injuries. Visual meteorological conditions prevailed in the area, and no flight plan was filed. According to family members, the flight originated about 1115, from the Twelve Oaks Airport, a private fly-in community, located about 9 miles southeast of Dunnellon.

Due to injuries sustained in the accident, the pilot was unable to be interviewed during the on-scene portion of the investigation.

According to the NTSB Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) submitted by the pilot, he reported that he and his nineteen year-old son were planning a short local area flight, and then return to the Twelve Oaks Airport. He said that as he attempted to retard the throttle to a cruise power setting after the initial climb, he discovered that he was unable to control the airplane's engine speed with the throttle, and the engine rpm remained at a high power setting. He elected to return to the Twelve Oaks Airport to attempt an emergency landing. He stated as he touched down on runway 04, a 2,655 foot long, by 100 foot wide turf-covered surface, with the airplane's engine still set at takeoff power, the airplane was moving too fast to stop, and he decided to abort the landing. As the airplane climbed on a northerly heading the engine began to slow down and lose power, and he selected an emergency landing area that contained 75-foot tall trees. The airplane collided with the trees, and sustained extensive damage to the wings, fuselage, and empennage. A postimpact fire ensued, with both the pilot and passenger trapped inside of the burning fuselage. The passenger was ultimately able to free the pilot before the airplane was consumed by fire.

CREW INFORMATION

The pilot held a private pilot certificate with airplane single-engine land rating. His most recent third-class medical certificate was issued on June 29, 2003, and contained no limitations.

According to the NTSB Pilot/Operator Aircraft Accident Report submitted by the pilot, his total aeronautical experience consisted of about 400 flight hours, of which 300 were accrued in the accident airplane make and model. In the preceding 90 and 30 days prior to the accident, the report lists a total of 15 and 10 flight hours, respectively.

AIRCRAFT INFORMATION

The airplane had accumulated a total time of approximately 2,882.6 hours. The most recent annual inspection was accomplished at an aircraft total time of 2,871.1 hours, about 11.5 hours before the accident.

METEOROLOGICAL INFORMATION

The closest official weather observation station is located at the Ocala Regional Airport, Ocala, Florida. On March 2, 2005, at 1115, an Aviation Routine Weather Report (METAR) was

reporting, in part: Wind, 100 degrees (true) at 6 knots; visibility, 10 statute miles; clouds and ceiling condition, clear; temperature, 52 degrees F; dew point, 18 degrees F; altimeter, 30.20 inHg.

WRECKAGE AND IMPACT INFORMATION

On March 3, the NTSB IIC, a Federal Aviation Administration (FAA) airworthiness inspector from the Orlando Flight Standards District Office, and representatives from Piper Aircraft and Textron Lycoming, examined the airplane wreckage at the accident site.

All of the airplane's major components were located at the main wreckage area, in an area of tree-covered, flat terrain, about 1 mile beyond departure end of runway 04. The average height of the trees in this area was 75 feet.

A path of wreckage debris, from an area of broken trees to the wreckage point of rest, was on a magnetic heading of 060 degrees. (All headings/bearings noted in this report are orientated towards magnetic north.) The path of wreckage debris measured about 180 feet from the initial impact point to the wreckage point of rest.

Several trees were broken and toppled at the wreckage site. Various small tree sections along the path of wreckage debris displayed sharp cuts orientated on about a 45-degree angle to the vertical axis of each section.

The first pieces of airplane wreckage discovered along the debris path were the airplane's red, tail-mounted anti-collision light lens, Plexiglas windshield fragments, and torn shreds of airplane aluminum skin. These items were not fire damaged.

The main portion of the airplane wreckage was located lying upright, with the nose of the airplane orientated on a 080 degree heading. Several trees and limbs were knocked down and burned within the main wreckage area.

With the exception of small portions of the airplane's wings and the empennage, a postcrash fire destroyed the entire airplane.

Due to impact and fire damage, the flight controls could not be moved by their respective control mechanisms. The continuity of the flight control cables was established from the cabin/cockpit area to the point of impact related damage. The instrument panel was consumed by fire, as was both wing-mounted fuel tanks.

The engine sustained fire and impact damage. The propeller blades had substantial leading and trailing edge gouging and chord-wise scratching.

A detailed engine examination revealed that the bolt that connects the throttle linkage to the fuel control arm was missing, and the throttle linkage was disconnected.

At the conclusion of the on-scene portion of the investigation there were no additional preaccident mechanical anomalies noted.

ADDITIONAL INFORMATION

During the on-scene portion of the investigation, residents of the Twelve Oaks Airport, a private fly-in community, approached the NTSB IIC, and the FAA airworthiness inspector. The residents offered information concerning the accident airplane and its owner/pilot.

A resident who lives near the accident pilot's home stated that about a week before the accident he noticed that the cowling had been removed from the accident airplane while the airplane was parked at the pilot's home. He said that it appeared that either the pilot, or a maintenance technician had been working on the airplane during that time. He said that he believed that either the pilot, or a maintenance technician, had been attempting to fix a stiff throttle condition.

During a follow-up examination of the accident airplane's airframe and engine logbooks, the FAA airworthiness inspector reported finding no additional logbook entries after the airplane and engine annual inspection on November 1, 2004. When asked by the FAA airworthiness inspector about the resident's report of seeing the cowling removed, the pilot/owner emphatically denied that either he, or his maintenance technician, had preformed any maintenance procedure prior to the accident. The FAA airworthiness inspector reported finding no logbook entries concerning repairs made to the throttle linkage or fuel control arm during the most recent annual inspection, or subsequent inspections.

During a telephone conversation with the NTSB IIC on June 8, 2005, a maintenance technician who had worked on the accident airplane about two years before the March 2, 2005 accident reported that the airplane had been involved in a previous, unreported accident that occurred around May or June of 2003. He said that the pilot/owner had landed fast on a wet runway, and slid off the end at the Twelve Oaks Airport. He said the airplane sustained substantial damage to the left wing, propeller, and engine mounts. The maintenance technician said that he had assumed that the pilot/owner had reported that accident. The maintenance technician said that when he completed the required repairs, and the airplane was once again airworthy, he asked the pilot/owner for his airframe and engine logbooks so he could make the required logbook endorsements. According to the maintenance technician, the pilot/owner replied by saying he did not want a record of the repairs in the logbook because it would devalue the price of the airplane. The maintenance technician said that he reluctantly made the required logbook endorsements on adhesive-backed logbook pages, and instructed the pilot/owner to insert the logbook page in both the engine and airframe logbooks. According to the FAA airworthiness inspector who reviewed that accident airplane's maintenance logbooks, there was no such entry in the logbook indicating that any major repairs had been accomplished.

When asked by the FAA airworthiness inspector, the pilot/owner emphatically denied the airplane had been involved in a previous, unreported accident.

The Safety Board released the wreckage, located at accident site, to the owner's family on March 3, 2005. The Safety Board retained no parts or components.

Pilot Information

Certificate:	Private	**Age:**	58, Male
Airplane Rating(s):	Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without Waivers/Limitations	**Last Medical Exam:**	06/01/2003
Occupational Pilot:		**Last Flight Review or Equivalent:**	06/01/2003
Flight Time:	400 hours (Total, all aircraft), 100 hours (Total, this make and model), 300 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Piper	**Registration:**	N444NM
Model/Series:	PA-32-300	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	32-7940197
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	11/01/2004, Annual	**Certified Max Gross Wt.:**	3400 lbs
Time Since Last Inspection:	11.5 Hours	**Engines:**	1 Reciprocating
Airframe Total Time:	2882.6 Hours	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-540-K1G5
Registered Owner:	Lucinda Mailloux	**Rated Power:**	300 hp
Operator:	Richard V. Mailloux	**Air Carrier Operating Certificate:**	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KOCF, 50 ft msl	**Observation Time:**	1115 EST
Distance from Accident Site:	14 Nautical Miles	**Condition of Light:**	Day
Direction from Accident Site:	30°	**Conditions at Accident Site:**	Visual Conditions
Lowest Cloud Condition:	Clear	**Temperature/Dew Point:**	11°C / -7°C
Lowest Ceiling:	None	**Visibility**	10 Miles
Wind Speed/Gusts, Direction:	6 knots, 10°	**Visibility (RVR):**	
Altimeter Setting:	30.2 inches Hg	**Visibility (RVV):**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hernando, FL (5FL7)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	1100 EST	**Type of Airspace:**	

Airport Information

Airport:	Twelve Oaks Airport (5FL7)	**Runway Surface Type:**	Grass/turf
Airport Elevation:	50 ft	**Runway Surface Condition:**	Dry
Runway Used:	04	**IFR Approach:**	None
Runway Length/Width:	2655 ft / 100 ft	**VFR Approach/Landing:**	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Serious	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Serious		

Administrative Information

Investigator In Charge (IIC):	Clinton O Johnson	**Adopted Date:**	03/28/2006
Additional Participating Persons:	Alan C Nemcik; Federal Aviation Administration; Orlando, FL Edward G Rogalski; Textron Lycoming; Belleview, FL Robert Martellotti; New Piper Aircraft; Vero Beach, FL		
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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.