Aviation Investigation Final Report

Location:	La Verne, California	**Accident Number:**	LAX04LA174
Date & Time:	March 27, 2004, 12:16 Local	**Registration:**	N81MF
Aircraft:	Mitsubishi MU-2B-26A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The twin turboprop airplane landed hard collapsing the nose gear, and causing substantial damage to the airframe. The pilot said that about 6-7 miles from the airport, in the terminal descent, he noticed the right engine torque meter read zero. This had occurred before, and the torque would come back if he manipulated the throttle. He continued the normal approach for landing. In the landing flare the airplane yawed right despite his corrective left rudder pedal input. The airplane landed hard, bouncing on the nose twice, breaking the nose wheel strut. It then slid about 2,000 feet down the runway. The ferry pilot, who flew the airplane to the repair facility after the accident, said that the engine power levers were consistently split throughout the entire ferry flight. In order to have the engine power perimeters matched, the right power lever had to be about 2 inches forward of the left one and this positional relationship was constant from flight idle to full power. Maintenance records had no record of compliance to Mitsubishi Service Bulletin No. 097/73-001, which was published "to assure the engine and propeller rigging is adjusted within manufactures specifications and to prevent potential degraded flight handling qualities associated with the flight idle power being set asymmetrically or too low."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to adequately compensate for an asymmetrical thrust condition and to maintain directional control during the landing flare. The owner/pilot's failure to comply with the applicable service bulletin concerning propeller/power control rigging was a factor.

Findings

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

Findings
1. 1 ENGINE
2. THROTTLE/POWER LEVER - ASYMMETRICAL
3. (F) MAINTENANCE,SERVICE BULLETIN/LETTER - NOT COMPLIED WITH - PILOT IN COMMAND
4. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INITIATED - PILOT IN COMMAND

Occurrence #2: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
5. LANDING GEAR,NOSE GEAR STRUT - OVERLOAD
6. PORPOISE/PILOT-INDUCED OSCILLATION - ENCOUNTERED - PILOT IN COMMAND
7. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On March 27, 2004, at 1216 Pacific standard time, a Mitsubishi MU-2B-26A, N81MF, experienced a hard landing at Brackett Field, La Verne, California. The owner operated the airplane under the provisions of 14 CFR Part 91. The pilot and two passengers were not injured, and the airplane was substantially damaged. Visual meteorological conditions prevailed, and an instrument flight plan had been filed. The personal cross-country flight originated at Lake Havasu, Arizona, at 1225 mountain standard time.

The pilot told the National Transportation Safety Board investigator-in-charge (IIC) that about 6-7 miles from the airport, in the terminal descent, he noticed that the right engine torque meter read zero. This had occurred before, and the torque would come back if he manipulated the throttle. He continued the normal approach for landing. In the landing flare the airplane yawed right despite his corrective left rudder pedal input. The airplane landed hard, bouncing on the nose twice and breaking the nose wheel strut. It then slid about 2,000 feet down the runway.

In a telephone conversation with the Safety Board IIC the ferry pilot hired to fly the airplane from Brackett Field to Tulsa, Oklahoma, after the accident, said that when airborne there was a significant split between the two engine power levers. The right engine power lever was consistently about 2 inches forward of the left power lever when the left and right engine parameters were matched up. When the ferry pilot was landing the airplane he kept the split between the levers in order to keep the engines producing equal power.

Examination of the airframe and right engine maintenance logbook revealed that compliance to Mitsubishi Service Bulletin (SB) No. 097/73-001 had not been entered. The SB was issued "to assure the engine and propeller rigging is adjusted within manufactures specifications and to prevent potential degraded flight handling qualities associated with the flight idle power being set asymmetrically or too low."

Pilot Information

Certificate:	Private	**Age:**	55,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):		**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3	**Last FAA Medical Exam:**	March 1, 2003
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	2000 hours (Total, all aircraft), 175 hours (Total, this make and model), 50 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mitsubishi	**Registration:**	N81MF
Model/Series:	MU-2B-26A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	375 SA
Landing Gear Type:	Retractable - Tricycle	**Seats:**	7
Date/Type of Last Inspection:	July 26, 2002 Annual	**Certified Max Gross Wt.:**	10520 lbs
Time Since Last Inspection:		**Engines:**	2 Turbo prop
Airframe Total Time:	3107.2 Hrs as of last inspection	**Engine Manufacturer:**	Airesearch
ELT:		**Engine Model/Series:**	TPE331-5
Registered Owner:	Burt Faibisoff	**Rated Power:**	665 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KPOC,1011 ft msl	**Distance from Accident Site:**	
Observation Time:	12:16 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	230°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.06 inches Hg	**Temperature/Dew Point:**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lake Havasu, AZ (KHII)	**Type of Flight Plan Filed:**	IFR
Destination:	La Verne, CA (KPOC)	**Type of Clearance:**	IFR
Departure Time:	12:25 Local	**Type of Airspace:**	Class C;Class D

Airport Information

Airport:	La Verne KPOC	**Runway Surface Type:**	Asphalt
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:	26	**IFR Approach:**	ILS
Runway Length/Width:	4839 ft / 75 ft	**VFR Approach/Landing:**	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	34.091667,-117.781944

Administrative Information

Investigator In Charge (IIC):	McKenny, Van
Additional Participating Persons:	John Johnson; Federal Aviation Administration; El Segundo, CA
Original Publish Date:	January 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59001