





LAX99LA060

N466MF

Substantial

# **Aviation Investigation Final Report**

VELOCITY

Registration:

Aircraft Damage:

Location: SAN DIEGO, California Accident Number:

**Date & Time:** December 29, 1998, 15:47 Local

Aircraft: Aegerter, Simon

173E-RG

Defining Event: Injuries: 3 None

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

The pilot stated he had experienced insufficient pitch control on landing at Tucson, Arizona, prior to the accident. He reported that he 'found play in the elevator control,' and was advised over the telephone by Velocity Inc. to add washers or spacers to the rear of the torque tube to remove the play. With the aid of a local pilot in Tucson, he added the washers and spacers to the rear of the torque tube. The pilot further stated that upon attempting to flare at Montgomery Field, 'the nose would not come up.' The aircraft bounced, veered off the runway, skidded across a grass area, and collided tail first with a parked Cessna 340. According to the pilot, on January 2, 1999, builders from Velocity Inc. inspected the airplane, and found that 'the front bearing of the aileron torque tube had come loose, thus preventing a full elevator down deflection.'

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate modification to the control systems, which resulted in a restricted elevator control.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING

### **Findings**

- 1. (C) FLT CONTROL SYST, YOKE/CONTROL STICK UNDERTORQUED
- 2. (F) FLIGHT CONTROL, ELEVATOR BLOCKED (PARTIAL)
- 3. (C) MAINTENANCE, MODIFICATION INADEQUATE OWNER/PILOT MECHANIC
- 4. (F) ELEVATOR RESTRICTED

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING

#### Findings

5. OBJECT - AIRCRAFT PARKED/STANDING

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### **Factual Information**

On December 29, 1998, at 1547 hours Pacific standard time, a Velocity 173E-RG, N466MF, veered off runway 28L on landing at Montgomery Field, San Diego, California, and collided with a parked Cessna 340, N6241X. The aircraft and the parked and unoccupied Cessna 340 sustained substantial damage. The private pilot and his two passengers were not injured. Visual meteorological conditions prevailed for the personal flight from Ryan Field in Tucson, Arizona, to Montgomery Field. This was the last leg of a cross-country flight, which originated the day before in Tampa, Florida. No flight plan was filed.

The pilot stated that he had experienced insufficient pitch control on landing at Tucson prior to the accident. He reported that he "found play in the elevator control," and was advised over the telephone by the aircraft designer, Velocity Inc., to add washers or spacers to the rear of the torque tube to remove the play. With the aid of a local pilot in Tucson, he added the washers and spacers to the rear of the torque tube.

The pilot further stated that upon attempting to flare, "the nose would not come up." The aircraft bounced, veered off the runway, skidded across a grass area, and collided tail first with the parked Cessna 340.

According to the pilot, "on January 2, 1999, several Velocity builders inspected the airplane and found that the front bearing of the aileron torque tube had come loose, thus preventing a full elevator down deflection."

#### **Pilot Information**

Certificate:	Private	Age:	60,Male
Airplane Rating(s):	Single-engine land	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 3 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	January 6, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	398 hours (Total, all aircraft), 75 hours (Total, this make and model), 331 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Aegerter, Simon	Registration:	N466MF
Model/Series:	VELOCITY 173E-RG VELOCITY 1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	DMO-326
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	70 Hrs	Engine Manufacturer:	Franklin
ELT:	Installed, activated	Engine Model/Series:	6A-350C1L
Registered Owner:	SABINA AEGERTER	Rated Power:	210 Horsepower
Operator:	SIMON AEGERTER	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:	MYF ,427 ft msl	Distance from Accident Site:	
Observation Time:	15:53 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	6 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	TUCSON , AZ (RYN )	Type of Flight Plan Filed:	None
Destination:	(MYF)	Type of Clearance:	VFR
Departure Time:	14:10 Local	Type of Airspace:	Class D

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# **Airport Information**

Airport:	MONTGOMERY FIELD MYF	Runway Surface Type:	Asphalt
Airport Elevation:	427 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	28L	IFR Approach:	None
Runway Length/Width:	3399 ft / 60 ft	VFR Approach/Landing:	Full stop

# 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:	32.799972,-117.129508(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Plagens, Howard	
Additional Participating Persons:	ART LAWLER; SAN DIEGO , CA	
Original Publish Date:	April 20, 2000	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=45527	

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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.

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