

# **Aviation Investigation Final Report**

**Location**: Pahokee, Florida **Accident Number**: ERA13CA426

Date & Time: September 22, 2013, 12:30 Local Registration: N244FM

Aircraft: MARCONI FRED I JR VELOCITY XL/RG Aircraft Damage: Substantial

**Defining Event:** Simulated/training event **Injuries:** 2 Serious

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of the experimental amateur-built airplane was performing a simulated forced landing to the airport runway. As the airplane was in the landing flare, another pilot radioed that the accident airplane's landing gear was still retracted. About that time, the aft mounted propeller struck the runway and the pilot increased power in an attempt to abort the landing. The pilot subsequently lost control of the airplane and it impacted terrain to the side of the runway, resulting in serious injuries to the pilot and flight instructor, and substantial damage to the airframe. Examination of the wreckage following the accident revealed that the landing gear switch was selected to the "UP" position.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to ensure that the landing gear were extended during the simulated forced landing attempt. Contributing to the outcome was the pilot's decision to continue the aborted landing after the propeller had contacted the runway.

### **Findings**

| Personnel issues | Use of equip/system - Pilot                              |
|------------------|--|
| Personnel issues | Incorrect action selection - Pilot                       |
| Aircraft         | Gear extension and retract sys - Incorrect use/operation |

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## **Factual Information**

### **History of Flight**

| Approach-VFR pattern downwind | Simulated/training event (Defining event) |
|-------------------------------|---|
| Landing                       | Landing gear not configured               |
| Landing                       | Abnormal runway contact                   |
| Landing                       | Collision with terr/obj (non-CFIT)        |

### **Pilot Information**

| Certificate:              | Private  | Age:                              | 68                |
|---------------------------|--|-----------------------------------|-------------------|
| Airplane Rating(s):       | Single-engine land   | Seat Occupied:                    | Left              |
| Other Aircraft Rating(s): | None   | Restraint Used:                   | 3-point           |
| Instrument Rating(s):     | None   | Second Pilot Present:             | Yes               |
| Instructor Rating(s):     | None   | Toxicology Performed:             | No                |
| Medical Certification:    | Class 3 With waivers/limitations   | Last FAA Medical Exam:            | November 15, 2012 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | December 18, 2011 |
| Flight Time:              | 987.2 hours (Total, all aircraft), 770.9 hours (Total, this make and model), 987.2 hours (Pilot In Command, all aircraft), 12.5 hours (Last 90 days, all aircraft), 6.8 hours (Last 30 days, all aircraft) |                                   |                   |

### Flight instructor Information

| Certificate:              | Flight instructor  | Age:                              | 78           |
|---------------------------|--|-----------------------------------|--------------|
| Airplane Rating(s):       | Single-engine land   | Seat Occupied:                    | Right        |
| Other Aircraft Rating(s): | None   | Restraint Used:                   | 3-point      |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | Yes          |
| Instructor Rating(s):     | Airplane single-engine   | Toxicology Performed:             | No           |
| Medical Certification:    | Class 3 With waivers/limitations   | Last FAA Medical Exam:            | May 24, 2012 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | May 20, 2012 |
| Flight Time:              | (Estimated) 4465 hours (Total, all aircraft), 550 hours (Total, this make and model), 4200 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft) |                                   |              |

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

| Aircraft Make:                | MARCONI FRED I JR                                     | Registration:                     | N244FM          |
|-------------------------------|---|-----------------------------------|-----------------|
| Model/Series:                 | VELOCITY XL/RG 3RX072                                 | Aircraft Category:                | Airplane        |
| Year of Manufacture:          | 1999  | Amateur Built:                    | Yes             |
| Airworthiness Certificate:    | Experimental (Special)                                | Serial Number:                    | 3RX072          |
| Landing Gear Type:            | Retractable - Tricycle                                | Seats:                            | 4               |
| Date/Type of Last Inspection: | July 20, 2013 Annual                                  | Certified Max Gross Wt.:          | 3000 lbs        |
| Time Since Last Inspection:   |   | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          | 770 Hrs at time of accident                           | Engine Manufacturer:              | Lycoming        |
| ELT:                          | C91A installed, activated, aided in locating accident | Engine Model/Series:              | IO 540          |
| Registered Owner:             | On file   | Rated Power:                      | 250 Horsepower  |
| Operator:                     | On file   | Operating Certificate(s)<br>Held: | None            |

## Meteorological Information and Flight Plan

| Conditions at Accident Site:     | Visual (VMC)                     | Condition of Light:                  | Day               |
|----------------------------------|----------------------------------|--------------------------------------|-------------------|
| Observation Facility, Elevation: | PBI,20 ft msl                    | Distance from Accident Site:         | 32 Nautical Miles |
| Observation Time:                | 12:53 Local                      | Direction from Accident Site:        | 100°              |
| <b>Lowest Cloud Condition:</b>   |                                  | Visibility                           | 10 miles          |
| Lowest Ceiling:                  | Broken / 2800 ft AGL             | Visibility (RVR):                    |                   |
| Wind Speed/Gusts:                | 7 knots /                        | Turbulence Type<br>Forecast/Actual:  | / None            |
| Wind Direction:                  | 170°                             | Turbulence Severity Forecast/Actual: | / N/A             |
| Altimeter Setting:               | 29.81 inches Hg                  | Temperature/Dew Point:               | 30°C / 24°C       |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |                                      |                   |
| Departure Point:                 | Hollywood, FL (HWO )             | Type of Flight Plan Filed:           | None              |
| Destination:                     | Hollywood, FL (HWO )             | Type of Clearance:                   | VFR               |
| Departure Time:                  | 11:00 Local                      | Type of Airspace:                    | Class G           |

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### **Airport Information**

| Airport:             | Palm Beach County Glades Arpt<br>PHK | Runway Surface Type:      | Asphalt         |
|----------------------|--------------------------------------|---------------------------|-----------------|
| Airport Elevation:   | 16 ft msl                            | Runway Surface Condition: | Dry             |
| Runway Used:         | 17                                   | IFR Approach:             | None            |
| Runway Length/Width: | 4116 ft / 75 ft                      | VFR Approach/Landing:     | Traffic pattern |

## Wreckage and Impact Information

| Crew Injuries:         | 1 Serious | Aircraft Damage:        | Substantial               |
|------------------------|-----------|-------------------------|---------------------------|
| Passenger<br>Injuries: | 1 Serious | Aircraft Fire:          | None                      |
| Ground Injuries:       | N/A       | Aircraft Explosion:     | None                      |
| Total Injuries:        | 2 Serious | Latitude,<br>Longitude: | 26.784999,-80.693336(est) |

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#### **Administrative Information**

| Investigator In Charge (IIC):     | Neylon, John  |
|-----------------------------------|---|
| Additional Participating Persons: | Guillaume Baudet; FSDO/FAA; Miramar, FL   |
| Original Publish Date:            | February 4, 2014  |
| Last Revision Date:               |   |
| Investigation Class:              | <u>Class</u>  |
| Note:                             | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket:             | https://data.ntsb.gov/Docket?ProjectID=88105  |

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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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