NATIONAL TRANSPORTATION SAFETY BOARD
NTSB Form 6120.1
PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

The pilot/operator aircraft accident/incident report may be filed by mailing in this form, per instructions on the last page. Copies of this form may be obtained from the NTSB Web site <http://www.ntsb.gov>, the National Transportation Safety Board Regional Offices, and the Federal Aviation Administration Flight Standards District Offices.

Rules pertaining to aircraft accidents/incidents, overdue aircraft, and safety issues are contained in Part 830 of the National Transportation Safety Board's Regulations, 49CFR. These rules state the authority of the Board, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall file a report with the Regional Office of the National Transportation Safety Board nearest the accident or incident for which immediate notification is required by section 830.5(a). **The report shall be filed within ten (10) days after an accident for which notification is required by Section 830.5 or when, after seven (7) days, an overdue aircraft is still missing.** An aircraft accident, as defined in 49CFR 830.2, is determined as an occurrence that involves a fatality, serious injury, or substantial damage. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, National Transportation Safety Board, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

The Pilot/Operator Aircraft Accident/Incident Report Form is used in determining the facts, conditions, and circumstances for aircraft accident prevention activities and for statistical purposes. It is necessary that **ALL** questions be answered completely and accurately to serve the above purposes.

B. DEFINITIONS

1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of “aircraft accident” includes “unmanned aircraft accident,” as defined at 49 C.F.R. 830.2.

2. "Substantial Damage" means damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.

3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM
It is necessary that ALL questions on this report be answered completely and accurately.
If more space is needed, continue on a blank sheet.

Nearest City/Place: Use the name of the nearest community that has a Post Office in the state where the accident/incident occurred.

Date & Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of manufacturer of the kit or plans when appropriate.

Max Gross Weight: Enter the certificated max gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Airworthiness Certificate: For light sport aircraft, if aircraft certificated as "Light Sport - Experimental", check both the "Light Sport" and "Experimental" check boxes.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle, cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Engine: Enter engine make and model information as indicated on the engine data plate.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "Doing Business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting **revenue** sightseeing operations under FAR Part 91 at the time of the accident.

Public Use: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Military operations should not be included under public use. If public use, also indicate whether the flight was conducted by Federal, State, or Local government.

Air Medical Flight: Indicate whether accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Purpose of Flight (FAR 91, 103, 133, 137): Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

PERSONAL—Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

BUSINESS—Includes all personal flying **without** a paid, professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE—Company flying **with** a paid, professional crew.

OTHER WORK USE—Miscellaneous flight operations conducted for compensation or hire such as construction work (not FAR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

INSTRUCTIONAL—Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

FERRY—Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

POSITIONING—Non-revenue flight conducted for the primary purpose of moving the aircraft to a maintenance facility or to load passengers or cargo, etc.

AERIAL APPLICATION—Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION—Aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP—Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW—Includes any flight operations conducted as part of an organized air race or public demonstration.

FLIGHT TEST—Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component, or evaluating an applicant for a pilot certificate or rating.

PUBLIC USE—See definition above.

UNKNOWN—Use only if the primary purpose of flight is not known.

Other Aircraft – Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, takeoff, or within 3 miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identification: Provide the official 3 or 4 character airport identifier.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident site.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident (reported as broken or overcast).

NOTAMs ((D), (L) and FDC), AIRMETs, SIGMETs, PIREPs: Describe all NOTAMs, AIRMETs, SIGMETs, PIREPs in effect near the accident/incident. For NOTAMs, state if they were distant (D), local (L), or Flight Data Center (FDC), if known.

Pilot Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Pilot A" and "Pilot B" do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the Instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none". If the pilot holds a pilot certificate other than student, and was flying an aircraft requiring an endorsement enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as Instructor".

Additional Flight Crew Members: Complete this section if there were more than two required flight crew members on the aircraft. This also includes a check airman performing official duties, but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Please enter identification and injury severity information for all passengers and other personnel involved in the accident. See page 1 of the instructions for the official definition of injury levels. Occupants are considered "Revenue" passengers if they were being carried for compensation or hire. The option "FAA" refers to any FAA personnel performing a flight related function, including flight check, airman practical test, etc.

Several questions throughout the form allow for multiple responses; when appropriate choose all responses that apply.

These instructions only pertain to major issue areas covered by the NTSB Form 6120.1 *Pilot/Operator Aircraft Accident/Incident Report*. For additional definitions of questions and responses, please refer to <http://www.ntsb.gov>.

NATIONAL TRANSPORTATION SAFETY BOARD
PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT
This form to be used for reporting civil and public use aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: KFCM Airport, Eden Prairie State: MN
ZIP: 55347 Country: United States
Latitude: 44:49:35 N (dd:mm:ss N/S) Longitude: 093:27:06 W (ddd:mm:ss E/W)

Date/Time

Date: 08/05/2013 (mm/dd/yyyy) Local Time: 0848
Time Zone: Central

Phase of Operation

- ☐ Standing
- ☐ Taxi
- ☐ Descent
- ☐ Takeoff (incl. initial climb)
- ☐ Climb
- ☑ Landing
- ☐ Cruise
- ☐ Maneuvering
- ☐ Approach
- ☐ Hover
- ☐ Other
- ☐ Unknown

Collision with Other Aircraft

- ☐ Midair
- ☐ On-ground
- ☑ None

Altitude of In-Flight Occurrence

0 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Embraer
Model: EMB 505
Serial Number: 50500094
Registration Number: N327FL **Amateur-built:** ☐ Yes ☑ No

Max Gross Weight: 17,968 lbs
Weight at Time of Accident/Incident: 13,500 lbs
Location of Center of Gravity at Time of Accident/Incident:
28.90 inches from ☐ nose or ☑ datum
-or- _____ Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft

- ☑ Airplane
- ☐ Balloon
- ☐ Blimp/Dirigible
- ☐ Glider
- ☐ Gyrocraft
- ☐ Helicopter
- ☐ Powered lift
- ☐ Ultralight
- ☐ Unknown

Type of Airworthiness Certificate *(Check all that apply)*

Standard
- ☐ Normal
- ☐ Utility
- ☐ Acrobatic
- ☑ Transport

Special
- ☐ Restricted
- ☐ Limited
- ☐ Provisional
- ☐ Experimental
- ☐ Special Flight
- ☐ Light Sport

Number of Seats: 9

If Large Aircraft, how many seats for:
Flight Crew: 2
Cabin Crew: 0
Passengers: 7

Landing Gear ☑ Retractable

Check any additional landing gear configuration that applies:
- ☑ Tricycle
- ☐ Tailwheel
- ☐ Amphibian
- ☐ Emergency Float
- ☐ Float
- ☐ Hull
- ☐ Unknown
- ☐ High Skid
- ☐ Skid
- ☐ Ski
- ☐ Ski/Wheel

Type of Maintenance Program

- ☐ Annual
- ☐ Conditional (Amateur-built only)
- ☐ Manufacturer's Inspection Program
- ☐ Other Approved Inspection Program (AAIP)
- ☑ Continuous Airworthiness
- ☐ Other, specify: _____

Last Inspection Type

- ☐ 100 Hour
- ☐ AAIP
- ☐ Annual
- ☐ Continuous Airworthiness
- ☑ Conditional Inspection
- ☐ Unknown

Date Last Inspection: 11/01/2012 (mm/dd/yyyy)

Airframe Total Time: 580 hrs
hours measured at *(check one)*
☐ Last Inspection ☑ Time of Accident/Incident

IFR Equipped
☑ Yes ☐ No ☐ Unknown

Stall Warning System Installed
☑ Yes ☐ No ☐ Unknown

Type of Fire Extinguishing System
☑ None
☐ Specify NA

ELT Installed
☑ Yes ☐ No

ELT Activated
☐ Yes ☑ No

ELT Aided in Locating Accident/Incident
☐ Yes ☑ No

ELT Manufacturer: Kannad
Model/Series: 406AF
Serial Number: S1821502-02
Battery Type: _____ **Battery Exp. Date:** 12/31/2017

Engine Type
- ☐ Reciprocating
- ☐ Turbo Shaft
- ☐ Turbo Prop
- ☐ Turbo Jet
- ☑ Turbo Fan
- ☐ Unknown

Reciprocating Fuel System Type
- ☐ Carburetor
- ☐ Fuel Injected

Propeller
- ☐ Fixed Pitch
- ☐ Controllable Pitch

Manufacturer: NA
Model: NA

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) ☐ Horsepower or ☑ lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	Pratt and Whitney	PW535E	PCE-DG0170	11/17/2011	3360	581	581	0
Eng. 2	Pratt and Whitney	PW535E	PCE-DG0171	11/18/2011	3360	581	581	0
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION

Registered Aircraft Owner

Name: Flight Options LLC

Fractional Ownership Aircraft: ☑ Yes ☐ No

Owner Address

City: Richmond Heights

State: Ohio ZIP: 44143

Country: United States

Operator of Aircraft ☑ Same As Registered Owner

Name: Flight Options LLC

Doing Business As: Flight Options LLC

Air Carrier/Operator Designator (4 Character Code): DJFA

Operator Address ☑ Same As Registered Owner

City:

State: ZIP:

Country:

Regulation Flight Conducted Under

☑ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ Public Use (select type)
☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ *Federal* ☐ *State* ☐ *Local*
☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ Unknown
☐ FAR 125 ☐ FAR 137 ☐ Armed Forces

Revenue Sightseeing Flight

☐ Yes ☑ No

Air Medical Flight

☐ Yes ☑ No

Purpose of Flight
for FAR 91, 103, 133, 137 *(Select one)*

☐ Personal
☐ Business
☐ Executive/Corporate
☐ Other Work Use
☐ Instructional
☐ Ferry
☑ Positioning
☐ Aerial Application
☐ Aerial Observation
☐ Air Drop
☐ Air Race / Show
☐ Flight Test
☐ Public Use
☐ Unknown

Revenue Operation
for FAR 121, 125, 129, 135 *(Select one)*

☐ Scheduled or Commuter
☑ Non-Scheduled or Air Taxi

Domestic or International

☑ Domestic ☐ International

Cargo Operation

☐ Passenger/Cargo
☐ Passenger _____How many?
☐ Cargo _____ lbs
☐ Mail

Type of Commercial Operating Certificate Held
(Check all that apply)

☐ None
☐ Flag Carrier Operating Certificate (121)
☐ Supplemental
☐ Air Cargo
☐ Foreign Air Carriers (129)
☐ Commuter Air Carrier (135)
☑ On-Demand Air Taxi (135)
☐ Large Helicopter (127)
☐ Rotorcraft External Load (133)
- or -
☐ Agricultural Aircraft (137)
☐ Other Operator of Large Aircraft

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for *other* aircraft)

Aircraft Registration Number

NA

Manufacturer: NA

Model: NA

Damage to Other Aircraft

☐ Destroyed ☐ Minor
☐ Substantial ☑ None

Registered Owner of Other Aircraft

First Name: NA
Middle Initial: NA
Last Name: NA

City: NA
State: NA ZIP: NA
Country: NA

Pilot of Other Aircraft

First Name: NA
Middle Initial: NA
Last Name: NA

City: NA
State: NA ZIP: NA
Country: NA

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)

Was there Mechanical Malfunction/Failure? ☐ Yes ☑ No ☐ Unknown

(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)

Total Time/Cycles On Part

_____ Hours

_____ Cycles

Time Since This Part Inspected/Overhauled

_____ Hours

DAMAGE TO AIRCRAFT AND OTHER PROPERTY

Aircraft Damage

☐ None ☑ Substantial
☐ Minor ☐ Destroyed

Aircraft Fire

☑ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Unknown Origin
☐ On-Ground

Aircraft Explosion

☑ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Unknown Origin
☐ On-Ground

Description of Damage to Aircraft and Other Property *(use additional sheet if necessary)*

The airplane departed the end of the runway and impacted the airport boundary fence coming to rest on a four-lane highway about 1,000 feet from the runway.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)

Airport Identifier: KFCM
Airport Name: Flying Cloud Airport
Proximity to Airport ☐ Off Airport/Airstrip ☑ On Airport ☐ On Airstrip

Distance From Airport Center: 1 SM
Direction From Airport: 090 degrees MAG
Airport Elevation: 906 ft. MSL

Approach Segment *(Select one)*

☐ On Instrument Approach ☑ Landing ☐ Base leg ☐ Final ☐ Go Around
☐ Crosswind ☐ Downwind ☐ Low Approach ☐ Aborted Landing (after touchdown)

IFR Approach *(Check all that apply)*

☐ None ☐ PAR ☐ MLS ☐ Practice
☐ ADF/NDB ☐ Sidestep ☐ LDA ☐ GPS
☐ SDF ☐ ILS ☐ ASR ☐ Loran
☐ VOR/TVOR ☐ Localizer Only ☑ Visual ☐ Unknown
☐ VOR/DME ☐ LOC-back course ☐ Contact
☐ TACAN ☐ RNAV ☐ Circling

VFR Approach *(Check all that apply)*

☐ None ☐ Stop and Go
☐ Traffic Pattern ☐ Touch and Go
☐ Straight-In ☐ Simulated Forced Landing
☐ Valley/Terrain Following ☐ Forced Landing
☐ Go Around ☐ Precautionary Landing
☐ Full Stop ☐ Unknown

Runway Information

Runway ID: 10R (L/R/C) Length: 5,000 ft Width: 100 ft

Runway/Landing Surface *(Check all that apply)*

☑ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow

Condition of Runway/Landing Surface *(Check all that apply)*

☐ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☑ Wet
☐ Rubber Deposits ☐ Soft ☐ Unknown
☐ Slush Covered ☐ Vegetation

FLIGHT ITINERARY INFORMATION

Last Departure Point

Airport ID: KPIT
City: PIttsburgh
State: PA
Country: United States

Time of Departure

Time: 0730
Time Zone: Eastern

Destination

Airport ID: KFCM
City: Minneapolis
State: Minnesota
Country: United States

Type Flight Plan Filed

☐ None ☐ VFR/IFR
☐ Company VFR ☑ IFR
☐ Military VFR ☐ Unknown
☐ VFR
Activated? ☑ Yes ☐ No

Type of ATC Clearance/Service *(Check all that apply)*

☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise
☐ VFR ☑ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA

Airspace where the accident/incident occurred *(Check all that apply)*

☐ Class A ☐ Class E ☐ Prohibited Area ☐ Jet Training Area ☐ Special
☐ Class B ☐ Class G ☐ Restricted Area ☐ TRSA ☐ Air Traffic Control Area
☐ Class C ☐ Demo Area ☐ Military Operations Area (MOA) ☐ FAR 93 ☐ Unknown
☑ Class D ☐ Warning Area ☐ Airport Advisory Area

Aircraft Load Description *(Check all that apply)*

☑ None ☐ Towing Glider ☐ Parachutists ☐ Livestock
☐ Passengers ☐ Towing Banner ☐ Water ☐ Unknown
☐ Cargo ☐ Other External ☐ Chemical/Fertilizer/Seeds

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff *(convert from pounds, as necessary)*

680 Gallons

Fuel Type

☐ 80/87 ☐ 115/145 ☐ JP3 ☐ Other, specify
☐ 100 Low Lead ☑ Jet A ☐ JP4
☐ 100/130 ☐ Automotive ☐ JP5

Other Services, if Any, Prior to Departure

No mechanical services.

EVACUATION OF AIRCRAFT

Was an emergency evacuation of the aircraft performed? ☑ Yes ☐ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location

Two pilots exited via the main cabin door.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Weather Observation Facility

Facility ID: KFCM

Observation Time: 1338z

Time Zone: Central

Distance from Accident Site: 0 NM

Direction from Accident Site: 000 degrees MAG

Source of Weather Information *(Check all that apply)*

☐ National Weather Service
☐ Flight Service Station
☐ TV/Radio
☑ Automated Report
☐ Commercial Weather Service (DUATS)
☐ Company
☐ Military
☐ Internet
☐ Unknown

Method of Briefing *(Check all that apply)*

☐ In Person
☐ Teletype
☐ Telephone/Computer
☑ Aircraft Radio
☐ TV/Radio
☐ Unknown

Briefing Type/Completeness

☐ Full
☐ Partial / Limited By Pilot
☐ Partial / Limited By Briefer
☐ Abbreviated
☑ Unknown
☐ Not Pertinent

Light Condition

☐ Dawn
☑ Day
☐ Dusk
☐ Night
☐ Dark Night
☐ Bright Night
☐ Not Reported

Visibility

6 miles

Sky/Lowest Cloud Condition

☐ Clear
☑ Few
☐ Partial Obscuration
☐ Scattered
☐ Thin Broken
☐ Thin Overcast
☐ Unknown

Ceiling

☐ None (clear)
☐ Broken
☑ Overcast
☐ Obscured
☐ Indefinite
☐ Unknown

Restriction to Visibility *(Check all that apply)*

☐ None
☐ Blowing Dust
☐ Blowing Sand
☐ Blowing Snow
☐ Blowing Spray
☐ Dust
☐ Fog
☐ Ground Fog
☐ Haze
☐ Ice Fog
☐ Smoke
☐ Unknown

Lowest Cloud Condition Height

200 ft AGL

Ceiling Height

7,000 ft AGL

Wind Direction

☑ Indicated: 150 degrees MAG

☐ Variable

Wind Speed

Velocity: 4 KTS

-or-

☐ Calm
☐ Light and Variable

Wind Gusts

Velocity: _____ KTS

☐ Gusting
☑ Not Gusting

Type of Turbulence *(Check all that apply)*

☑ None
☐ Clear Air
☐ In Clouds
☐ Vicinity of Thunderstorm

Severity of Turbulence

☐ Extreme
☐ Severe
☐ Moderate
☐ Moderate Chop
☐ Light

NOTAMs (D, L and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident

See Attached

Temperature: 18 (C)
or _____ (F)

Altimeter Setting: 29.89 in. HG
or _____ MB

Density Altitude: 1,547 ft

Dew Point: 17 (C)
or _____ (F)

Icing Forecast

Amount		Type
☑ None	☐ Moderate	☐ Rime
☐ Trace	☐ Severe	☐ Clear
☐ Light		☐ Mixed

Icing Actual

Amount		Type
☑ None	☐ Moderate	☐ Rime
☐ Trace	☐ Severe	☐ Clear
☐ Light		☐ Mixed

Type of Precipitation *(Check all that apply)*

☑ None
☐ Rain
☐ Snow
☐ Hail
☐ Rain Showers
☐ Freezing Rain
☐ Snow Shower
☐ Drizzle
☐ Ice Pellets
☐ Snow Pellets
☐ Snow Grains
☐ Ice Crystals
☐ Ice Pellets Shower
☐ Freezing Drizzle

Intensity of Precipitation

☐ Light ☐ Moderate ☐ Heavy

PILOT "A" INFORMATION

Pilot "A" Responsibilities at the Time of Accident/Incident

☑ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

Pilot "A" Identification

First Name: Theodore
Middle Initial: S
Last Name: LaFond

City: [redacted]
State: North Carolina ZIP: 27513
Country: United States

Age at time of Accident/Incident: 50 Date of Birth: [redacted]/1964 *mm/dd/yyyy*

Certificate Number: [redacted]

Degree of Injury	Seat Occupied	Seat Belt	Shoulder Harness
☑ None ☐ Fatal	☑ Left ☐ Front ☐ Unknown	Used ☑ Yes ☐ No	Used ☑ Yes ☐ No
☐ Minor ☐ Unknown	☐ Right ☐ Rear	Available ☑ Yes ☐ No	Available ☑ Yes ☐ No
☐ Serious	☐ Center ☐ Single		

Pilot Certificate(s) *(Check all that apply)*

☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☑ Airline Transport ☐ U.S. Military

Principal Occupation	Medical Certificate	Medical Certificate Validity	Date of Last Medical
☑ Pilot	☐ None ☐ Class 3	☐ Without limitations/waivers	05/14/2013
☐ Other	☑ Class 1 ☐ Driver's License (Sport Pilot only)	☑ With limitations/waivers	*mm/dd/yyyy*
☐ Unknown	☐ Class 2 ☐ Unknown	☐ Unknown	

Medical Certificate Limitations

Must wear corrective lenses.

Medical Certificate Waivers

None

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 06/07/2013 *mm/dd/yyyy*

Flight Review Aircraft

Make: Embraer
Model: EMB 505

Airplane Rating(s) *(Check all that apply)*

☐ None
☑ Single-Engine Land
☐ Single-Engine Sea
☑ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s) *(Check all that apply)*

☐ None
☐ Airship
☐ Free Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s) *(Check all that apply)*

☐ None
☑ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s) *(Check all that apply)*

☑ None
☐ Airplane Single-Engine
☐ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift
☐ Instrument Airplane
☐ Instrument Helicopter
☐ Helicopter
☐ Glider
☐ Sport

Type Ratings

BE-400, CE-500, EMB-505, MU-300w

Student Endorsements *(Include dates)*

Flight Time *(enter appropriate number of hours in each box)*	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	8,158	1,081	396	7,762	1,216	1,216	0	0	0	0
Pilot in Command (PIC)	4,610	541	396	4,210	120	460	0	0	0	0
Time as Instructor	0	0	0	0	0	0	0	0	0	0
This Make/Model					91	113	0			
Last 90 Days	153	153	0	153	3	5	0	0	0	0
Last 30 Days	74	74	0	74	2	1	0	0	0	0
Last 24 Hours	7	7	0	7	0	0	0	0	0	0

PILOT "B" INFORMATION

Pilot "B" Responsibilities at the Time of Accident/Incident

☐ Pilot ☑ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

Pilot "B" Identification

First Name: Bruce
Middle Initial: A
Last Name: Addison

City: Youngstown
State: FL ZIP: 32466
Country: United States

Age at time of Accident/Incident: 61 Date of Birth: [redacted]1962 *mm/dd/yyyy*

Certificate Number: [redacted]

Degree of Injury
☑ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Seat Occupied
☐ Left ☐ Front ☐ Unknown
☑ Right ☐ Rear
☐ Center ☐ Single

Seat Belt
Used ☑ Yes ☐ No
Available ☑ Yes ☐ No

Shoulder Harness
Used ☑ Yes ☐ No
Available ☑ Yes ☐ No

Pilot Certificate(s) *(Check all that apply)*

☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☑ Airline Transport ☐ U.S. Military

Principal Occupation
☑ Pilot
☐ Other
☐ Unknown

Medical Certificate
☐ None ☐ Class 3
☑ Class 1 ☐ Driver's License (Sport Pilot only)
☐ Class 2 ☐ Unknown

Medical Certificate Validity
☐ Without limitations/waivers
☑ With limitations/waivers
☐ Unknown

Date of Last Medical
02/02/2013 *mm/dd/yyyy*

Medical Certificate Limitations

Must wear corrective lenses.

Medical Certificate Waivers

NA

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 03/08/2013 *mm/dd/yyyy*

Flight Review Aircraft
Make: Embraer
Model: EMB 505

Airplane Rating(s) *(Check all that apply)*
☐ None
☑ Single-Engine Land
☐ Single-Engine Sea
☑ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s) *(Check all that apply)*
☑ None
☐ Airship
☐ Free Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s) *(Check all that apply)*
☐ None
☑ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s) *(Check all that apply)*
☐ None
☐ Airplane Single-Engine
☐ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift
☐ Instrument Airplane
☐ Instrument Helicopter
☐ Helicopter
☐ Glider
☐ Sport

Type Ratings

HS-125, EMB-505

Student Endorsements *(Include dates)*

Flight Time *(enter appropriate number of hours in each box)*	**All Aircraft**	**This Make & Model**	**Airplane Single Engine**	**Airplane Multiengine**	**Night**	**Instrument**		**Rotorcraft**	**Glider**	**Lighter Than Air**
						Actual	**Simulated**			
Total Time	12,348	150	2,601	9,747	430	927	0	0	0	0
Pilot in Command (PIC)	5,128	0	2,601	2,527	250	513	0	0	0	0
Time as Instructor	0	0	0	0	0	0	0	0	0	0
This Make/Model					4	46	0			
Last 90 Days	101	101	0	0	3	19	0	0	0	0
Last 30 Days	48	48	0	0	1	8	0	0	0	0
Last 24 Hours	5	5	0	0	0	0	0	0	0	0

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)

Pilot Name and Address

First Name: NA
Middle Initial: NA
Last Name: NA
City: NA
State: NA ZIP: NA
Country: NA

Degree of Injury
☐ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Pilot Certificate(s) *(Check all that apply)*
☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military

Seat Occupied
☐ Left ☐ Front
☐ Right ☐ Rear
☐ Center ☐ Single
☐ Unknown

Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No

Total Flight Time at the Time of this Accident/Incident: ____________hrs

Pilot Name and Address

First Name: NA
Middle Initial: NA
Last Name: NA
City: NA
State: NA ZIP: NA
Country: NA

Degree of Injury
☐ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Pilot Certificate(s) *(Check all that apply)*
☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military

Seat Occupied
☐ Left ☐ Front
☐ Right ☐ Rear
☐ Center ☐ Single
☐ Unknown

Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No

Total Flight Time at the Time of this Accident/Incident: ____________hrs

Pilot Name and Address

First Name: NA
Middle Initial: NA
Last Name: NA
City: NA
State: NA ZIP: NA
Country: NA

Degree of Injury
☐ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Pilot Certificate(s) *(Check all that apply)*
☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military

Seat Occupied
☐ Left ☐ Front
☐ Right ☐ Rear
☐ Center ☐ Single
☐ Unknown

Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No

Total Flight Time at the Time of this Accident/Incident: ____________hrs

PASSENGER(S) / OTHER PERSONNEL (Include flight attendants; continue on separate sheet if necessary)

Name and Address	Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown
First Name: NA Middle Initial: NA Last Name: NA City: NA State: NA ZIP: NA Country: NA	NA	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: Middle Initial: Last Name: City: State: ZIP: Country:		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State time and point of departure, intended destination, and services obtained.

On August 5, 2013, at 0848 central daylight time, N327FL, an Embraer S.A. EMB-505, multi-engine turbofan airplane, was substantially damaged during landing at Flying Cloud Airport (FCM), Eden Prairie, Minnesota. The two pilots were not injured. Day visual meteorological conditions (VMC) prevailed at the time of the accident and an instrument flight rules flight plan had been filed for the 14 Code of Federal Regulations Part 91 positioning flight. The airplane had departed Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania, about 0730 eastern daylight time and was destined for FCM.

The pilots reported that the airplane was on a steep visual approach when they landed long and fast. The pilot flying also reported that after touchdown he could feel the pulsing of the anti-skid brakes but was unable to stop on the runway surface. The airplane departed the end of the runway and impacted the airport boundary fence coming to rest on a four-lane highway about 1,000 feet from the runway.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

The crew adhering to Flight Option's Flight Operation Manual Section 4.33.8 regarding Stabilized Approach Criteria could have prevented this accident. This section reads as follows:

All flights must be stabilized at 500' above MDA/DH when IMC or 500' above airport elevation when in VMC conditions. A go-around must be initiated if the aircraft does not meet the stabilized approach criteria.
Small, momentary deviations in airspeed, sink rate, glidepath and course that require minor corrections do not require an immediate go-around. PMs should make necessary callouts for minor deviations to assist the PF in making immediate corrections to maintain stabilized approach criteria.
An approach is stabilized when it meets the following criteria:
1. All briefings have been conducted.
2. Aircraft is fully configured per aircraft profile for landing (except for full flaps during circling or one-engine inoperative).
3. IAS airspeed is no more than VREF + 20 KTS and no less than V.
4. IVSI is no more than 1000' per minute.
5. Within one dot CDI deflection both lateral and vertical (when applicable).
6. No flight instrument flags unless the landing runway or visual references are in sight.*
7. Unique approach procedures or abnormal conditions requiring a deviation from the above REF
elements of a stabilized approach require that the crew conduct a special briefing prior to the approach.
* Does not apply to maintenance deferred instruments.
An approach that becomes unstabilized requires an immediate go-around.
To prevent ATC speed clearances that may compromise a stabilized approach, do not accept speed assignments in excess of 170KTS closer than five miles from the runway approach end.

Go Around/Missed Approach Policy
When the safe outcome of an approach is in doubt it is the responsibility of both crewmembers to initiate a go-around/missed approach immediately. Any pilot shall call for a go-around/missed approach if there are indications that a safe landing cannot be completed.

ADDITIONAL INFORMATION *(Please type or print in ink)*

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report	**Signature and Name of Pilot/Operator**
08/08/2013 *mm/dd/yyyy*	Signature: Type or Print Name:

Signature and Name of Person Filing Report if Other than Pilot/Operator

Signature: [redacted]

Type or Print Name: Bryan Gross

Title: Director of Safety

FOR NTSB USE ONLY

NTSB Accident/Incident No.	**Reviewed by NTSB Regional Office**	**Name of Investigator**	**Date Report Received**
CEN13LA462	NTSB Central Region	Thomas J. Latson, Jr.	`8/8/2013