

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: New Field State: AZ
ZIP: 85634 Country: United States of America
Latitude: N31 32.51 (dd:mm:ss N/S) Longitude: W111 41.55 (ddd:mm:ss E/W)

Date/Time

Date: 11/23/2012 Local Time: 1410
mm/dd/yyyy Time Zone: MST AZ

Phase of Operation

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

Collision with Other Aircraft

☐ Midair
☐ On-ground
☒ None

Altitude of In-Flight Occurrence

3,100 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Eurocopter

Model: AS350B3 2B1

Serial Number: 7105

Registration Number: 3984A

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 5,225 lbs

Weight at Time of Accident/Incident: 3,571 lbs

Location of Center of Gravity at Time of Accident/Incident:
133.62 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: 6

If Large Aircraft, how many seats for:

Flight Crew: 2

Cabin Crew: 0

Passengers: 4

Landing Gear ☐ Retractable

Check any additional landing gear configuration that applies:

☐ Tricycle ☐ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☒ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Unknown

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 ☐ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☐ Annual ☐ Unknown

Date Last Inspection:
mm/dd/yyyy

Airframe Total Time: 1,056 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

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: Wulfsburg Electronics

Model/Series: 406 Mhz ELT C406N

Serial Number: 10197

Battery Type: Lithium

Battery Exp. Date: Jan 2016

Engine Type

☒ Reciprocating ☐ Turbo Jet
☒ Turbo Shaft ☐ Turbo Fan
☐ Turbo Prop ☐ Unknown

Reciprocating Fuel System Type

☐ Carburetor
☐ Fuel Injected

Propeller

☐ Fixed Pitch
☐ Controllable Pitch

Manufacturer:
Model:

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	Turbomeca	2B1	51068	8/18/2010	543 max cont	1,056	56	0
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: <u>US Customs and Border Protection, US Government</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: <u>Washington</u> State: <u>D.C.</u> ZIP: <u>20229</u> Country: <u>USA</u>
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		Operator Address ☐ Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____
Regulation Flight Conducted Under ☐ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces ☒ Public Use (select type) ☒ Federal ☐ State ☐ Local ☐ Unknown		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 (Select 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: _____	Manufacturer: _____ Model: _____	Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☐ None
Registered Owner of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		
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 American Eurocopter Corporation (AEC) damage assessment team conducted the post accident damage assessment on 12/4/2012. The following initial assessment of the damage to the airframe based upon the cursory visual inspection (without any disassembly) was determined:

Tail cone (aft Fuselage) – evidence of wrinkles in the skin,

Tail Boom - scrapped,

Vertical fins – scrapped,

Tail rotor drive train (entire) – scrapped

Tail rotor blades and pitch change spider assembly - scrapped

RH landing gear spring- bent upwards - scrapped,

Lower wire strike – bent - scrapped

The Engine produces a grinding noise that is heard when the engine is rotated.

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

Airport Identifier: _____

Distance From Airport Center: _____ SM

Airport Name: _____

Direction From Airport: _____ degrees MAG

Proximity to Airport ☐ Off Airport/Airstrip ☐ On Airport ☐ On Airstrip

Airport Elevation: _____ 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

☐ Traffic Pattern

☐ Straight-In

☐ Valley/Terrain Following

☐ Go Around

☐ Full Stop

☐ Stop and Go

☐ Touch and Go

☐ Simulated Forced Landing

☐ Forced Landing

☐ Precautionary Landing

☐ Unknown

Runway Information

Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ 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

☐ Holes

☐ Ice Covered

☐ Rough

☐ Rubber Deposits

☐ Slush Covered

☐ Snow-Compacted

☐ Snow-Crusted

☐ Snow-Dry

☐ Snow-Wet

☐ Soft

☐ Vegetation

☐ Water-Calm

☐ Water-Choppy

☐ Water-Glassy

☐ Wet

☐ Unknown

FLIGHT ITINERARY INFORMATION**Last Departure Point**

Airport ID: KDMA

City: Tucson

State: AZ

Country: United States

Time of Departure

Time: 1208

Time Zone: MST

Destination

Airport ID: KDMA

City: Tucson

State: AZ

Country: United States

Type Flight Plan Filed

☒ None

☐ Company VFR

☐ Military VFR

☐ VFR

☐ VFR/IFR

☐ IFR

☐ Unknown

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 B

☐ Class C

☐ Class D

☐ Class E

☒ Class G

☐ Demo Area

☐ Warning Area

☐ Prohibited Area

☐ Restricted Area

☒ Military Operations Area (MOA)

☐ Airport Advisory Area

☐ Jet Training Area

☐ TRSA

☐ FAR 93

☐ Special

☐ Air Traffic Control Area

☐ Unknown

Aircraft Load Description (Check all that apply)

☒ None

☐ Passengers

☐ Cargo

☐ Towing Glider

☐ Towing Banner

☐ Other External

☐ Parachutists

☐ Water

☐ Chemical/Fertilizer/Seeds

☐ Livestock

☐ Unknown

FUEL & SERVICES INFORMATION**Fuel on Board at Last Takeoff**

(convert from pounds, as necessary)

143 Gallons

Fuel Type

☐ 80/87

☐ 100 Low Lead

☐ 100/130

☐ 115/145

☒ Jet A

☐ Automotive

☐ JP3

☐ JP4

☐ JP5

☐ Other, specify _____

Other Services, if Any, Prior to Departure

Not applicable

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

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

Pilot exited normally through right side pilot door.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**

Facility ID: KDMA

Observation Time: 2058Z

Time Zone: MST

Distance from Accident Site: 54 NM

Direction from Accident Site: 038 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**

50 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**

ft AGL

Ceiling Height

ft AGL

Wind Direction☒ Indicated:

120 degrees MAG

☐ Variable**Wind Speed**

Velocity: 13 KTS

-or-

☐ Calm☐ Light and Variable**Wind Gusts**

Velocity: 20 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**

None for immediate area of accident.

Temperature: 29 (C)
or 84 (F)Altimeter Setting: 3013 in. HG
or MB

Density Altitude: 4,870 ft

Dew Point: 0 (C)
or (F)**Icing Forecast**

Amount

☒ None☐ Trace☐ Light☐ Moderate☐ Severe

Type

☐ Rime☐ Clear☐ Mixed**Icing Actual**

Amount

☒ None☐ Trace☐ Light☐ Moderate☐ Severe

Type

☐ Rime☐ Clear☐ 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: <u>Joseph</u> City: <u>Tucson</u> Middle Initial: <u>M</u> State: <u>AZ</u> ZIP: <u>85707</u> Last Name: <u>Stuppiello</u> Country: <u>United States</u> Age at time of Accident/Incident: <u>31</u> Date of Birth: [REDACTED] 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 <u>03/22/2012</u> mm/dd/yyyy																																																																																													
Medical Certificate Limitations None																																																																																																				
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Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>07/27/2012</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Eurocopter</u> Model: <u>AS350</u>																																																																																																
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 None						Student Endorsements (Include dates) None																																																																																														
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 2px;">Flight Time (enter appropriate number of hours in each box)</th> <th rowspan="2" style="padding: 2px;">All Aircraft</th> <th rowspan="2" style="padding: 2px;">This Make & Model</th> <th rowspan="2" style="padding: 2px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 2px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 2px;">Night</th> <th colspan="2" style="padding: 2px;">Instrument</th> <th rowspan="2" style="padding: 2px;">Rotorcraft</th> <th rowspan="2" style="padding: 2px;">Glider</th> <th rowspan="2" style="padding: 2px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 2px;">Actual</th> <th style="padding: 2px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 2px;">Total Time</td> <td>2,240</td> <td>687</td> <td>0</td> <td>0</td> <td>750</td> <td>35</td> <td>75</td> <td>2,240</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Pilot in Command (PIC)</td> <td>1,900</td> <td>655</td> <td>0</td> <td>0</td> <td>600</td> <td>20</td> <td>50</td> <td>1,900</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Time as Instructor</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">This Make/Model</td> <td></td> <td></td> <td></td> <td></td> <td>430</td> <td>0</td> <td>8</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 90 Days</td> <td>95</td> <td>71</td> <td>0</td> <td>0</td> <td>33</td> <td>0</td> <td>0</td> <td>95</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 30 Days</td> <td>59</td> <td>40</td> <td>0</td> <td>0</td> <td>9</td> <td>0</td> <td>0</td> <td>59</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 24 Hours</td> <td>5</td> <td>5</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>5</td> <td>0</td> <td>0</td> </tr> </tbody> </table>											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	2,240	687	0	0	750	35	75	2,240	0	0	Pilot in Command (PIC)	1,900	655	0	0	600	20	50	1,900	0	0	Time as Instructor	0	0	0	0	0	0	0	0	0	0	This Make/Model					430	0	8				Last 90 Days	95	71	0	0	33	0	0	95	0	0	Last 30 Days	59	40	0	0	9	0	0	59	0	0	Last 24 Hours	5	5	0	0	0	0	0	5	0	0
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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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ Age at time of Accident/Incident: _____ Date of Birth: _____ mm/dd/yyyy Certificate Number: _____											
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 _____ mm/dd/yyyy				
Medical Certificate Limitations											
Medical Certificate Waivers											
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: _____ mm/dd/yyyy				Flight Review Aircraft Make: _____ Model: _____							
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						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											
Pilot in Command (PIC)											
Time as Instructor											
This Make/Model											
Last 90 Days											
Last 30 Days											
Last 24 Hours											

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)																
Pilot Name and Address First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____						_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ 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 November 23, 2012, a Customs and Border Protection pilot was assigned to conduct a patrol along the southwest border aboard an AS-350B32B1, registered as N3984A, and in use by the Tucson Air Branch.

At approximately 1000hr (MST), the pilot arrived at work and conducted the requisite preflight planning for the assigned mission and filed a risk assessment with the command duty officer (CDO) located at the Tucson Air Branch. At approximately 1130hr (MST) the PIC conducted a preflight inspection of the aircraft.

At approximately 1208hr (MST), the pilot of N3984A departed to the assigned patrol area. VFR conditions were reported on take-off with gusty winds forecast. At approximately 1210L the pilot was requested to assist a ground unit and team approximately ½ mile south of Little Church.

At approximately 1315hr (MST) the pilot was requested to assist another ground unit and team in the vicinity of the San Miguel. After about 45 minutes of assisting ground units with no results, the pilot departed the area.

At approximately 1400hr (MST) the pilot decided to take a momentary break to have a snack. At approximately 1410hr (MST) a suitable landing zone was selected. The pilot conducted a high/low reconnaissance and based on the strength of the winds (approx. 10kt from the east) executed an approach to a high hover followed by a vertical landing to the landing zone on an approximate heading of 040° magnetic. Upon touchdown, the pilot stated he performed a stability check with the cyclic and then lowered the collective to the full down position. At this time the pilot added cyclic and collective friction to prevent the controls from moving inadvertently while he gathered his lunch from his lunch bag located just aft and to the right of his seat against the door.

The pilot then used his left hand to guard the cyclic and grabbed the lunch bag with his right hand. He then opened the lunch bag and retrieved the small container of chili to place on the vacant passenger seat beside him. He then let go of the cyclic with his left hand and, while guarding the cyclic with his legs, used two hands to seal/snap the lunch bag closed and replace it behind the seat. It was at this time that he felt the nose of the aircraft begin a slight pitch upward and get light on the front part of the skids. The pilot quickly placed his hands back on the controls and then added forward cyclic to correct for the upward pitch of the nose to ensure positive skid contact with the ground. Within seconds, the aircraft began to exhibit vertical dynamic oscillations that continued to resonate and increase in intensity. The pilot then made a positive collective application to lift the aircraft off the ground and regain aircraft stability.

As the aircraft lifted off the ground, the pilot noted the aircraft lurch forward and downward in an unusually nose-low attitude. The pilot then rapidly applied aft cyclic and a positive collective input to correct for the nose down attitude which momentarily placed the aircraft in a 5 foot hover (approx. 1 second) followed immediately by an uncommanded left yaw (spin) around the nose for which the pilot experienced no tail rotor control. The aircraft continued to spin to the left until the pilot made a simultaneous reduction in collective and aggressive left cyclic application to arrest the spin and land the aircraft. Upon landing the pilot performed an emergency engine shutdown and egressed the aircraft once the rotor blades had stopped. Following his egress the pilot noticed the aft section of the tail boom was severed and the tail rotor was missing. The pilot then attempted to make cell phone contact with his home station to inform them of what happened but was unsuccessful due to poor cell phone coverage. The pilot then used his portable handheld radio and contacted ground units to relay the situation to his home station. The pilot's home station Operations Duty Officer (ODO) was notified at approximately 1425hr (MST) advising them of the downed aircraft and dispatched ground units in the vicinity to assist as required. The ODO at the pilot's home station initiated the organizations mishap plan and diverted another aircraft on patrol to the accident location.

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

Operator/Owner Safety Recommendation

NARRATIVE HISTORY OF FLIGHT (Cont'd)

At approximately 1500hr (MST) the Branch mishap plan execution/notifications were completed.

ADDITIONAL INFORMATION/COMMENTS:

The aircraft was equipped with an Appareo Vision 1000 Camera system for the purposes of accident investigation. The camera was removed and sent to the NTSB Vehicle Recorder Division for examination of the 2hr internal media storage. The results of the examination were inconclusive as there was no recordings for the month of November. Additionally, during the retrieval of the camera prior to shipping to the NTSB it was discovered that the camera's power connector had been loosely disconnected and as such had not logged a recording since September 30, 2012. It was later found that there was an aircraft Supplemental Type Certificate (STC SR02797C11) for the camera installation. That STC contained a "Tamper Evident Seal" (Appareo P/N - 350520-000003) that was not installed at the time of the incident.

Further information regarding the accident will be provided by the Office of Air and Marine (OAM) in a formal Accident Report upon executive staff approval. The OAM lead investigator is also the OAM National Air Safety Program Manager and the POC for any questions regarding the document. For additional information please contact SAIA Mills or his Supervisor, Andrew S. Campbell, Director of Safety and Risk Management, OAM:

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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

12/11/2012

mm/dd/yyyy

Signature

Signature

Type or Print Name: Joseph M. Stuppiello

Signature and Name of Person Filing Report (If Other than Pilot/Operator)

Signature:

Type or Print Name: James Mills

Title: Supervisory Air Interdiction Agent/Aviation Safety Program Manager

FOR NTSB USE ONLY

NTSB Accident/Incident No.

WPR13LA051

Reviewed by NTSB Regional Office

WPR Federal Way, WA

Name of Investigator

Thomas M. Little

Date Report Received

12/14/2012