

National Transportation Safety Board
North Central Regional Office
31 West 775 North Ave
West Chicago, IL 60185

July 15, 2011

In reference to Attached Pilot/Operator Aircraft Accident Report

To Whom It May Concern:

Enclosed is the completed accident report on a June 30, 2011 accident involving Powered Parachute N734MP. This accident has been investigated by Mike Batson and Bob Gay of the Milwaukee FAA FSDO. Mike Batson advised that he had been in contact with an inspector in your office regarding this accident, and that we should send our report to this office, which we are doing.

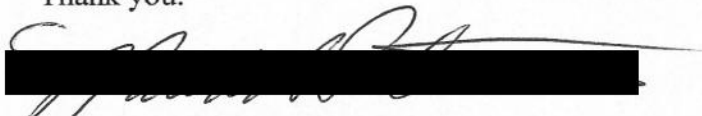
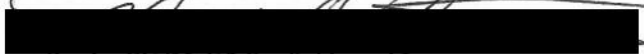
The pilot involved in this accident remains in the hospital and was just able to sign the forms. Mike Batson interviewed the pilot on Tuesday, July 12, 2011 in the hospital.

Attached to the accident report are 4 attachments;

1. Pilot statement on the accident
2. Pilot statement about training received in his BFR 5 days before the accident
3. Owner statement about the accident
4. Pilot & Owner combined Recommendation on how this accident might have been prevented.

If any further information is required, you may contact me directly or thru Mike Batson.

Thank you.



Mark Peterson, Managing Member
M & M Adventures, LLC
Owner of PPC N734MP

Enclosures

Cc: Mike Batson; Milwaukee FAA FSDO

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: <u>DCONTO</u> State: <u>WI</u> ZIP: <u>54153</u> Country: <u>USA</u> Latitude: <u>N44° 52.616'</u> (dd-mm:ss NS) Longitude: <u>W087° 57.996'</u> (ddd-mm:ss E/W)					Date/Time Date: <u>06/30/2011</u> Local Time: <u>6:27 AM</u> mm dd yyyy Time Zone: <u>Central</u>				
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 _____ ft MSL		
AIRCRAFT INFORMATION									
Manufacturer: <u>POWRACHUTE</u> Model: <u>AIR WOLF 912 ULS</u> Serial Number: <u>A 153 ULS</u> Registration Number: <u>N734MP</u> Amateur-built: ☐ Yes ☒ No					Max Gross Weight: <u>1150</u> lbs Weight at Time of Accident/Incident: <u>1014</u> lbs Location of Center of Gravity at Time of Accident/Incident: _____ 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: <u>2</u> If Large Aircraft, how many seats for: Flight Crew: _____ Cabin Crew: _____ Passengers: _____		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: <u>2.5</u> 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 ELT Activated ☐ Yes ☒ No ☐ Yes ☒ No			ELT Manufacturer: _____ Model/Series: _____ Serial Number: _____ Battery Type: _____ Battery Exp. Date: _____						
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: <u>WARP DRIVE</u> Model: <u>68" - 3 Blade Pusher Configuration</u>				
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	ROTAX	912 ULS	6771800	1/2011	100	2.5			
Eng. 2									
Eng. 3									
Eng. 4									

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: <u>M & M ADVENTURES, LLC</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner <u>[REDACTED]</u> City: <u>Green Bay</u> State: <u>WI</u> ZIP: <u>54313</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 ☐ 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 (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) <i>only damage was to</i> Aircraft: - Bottom rear of airframe bent upwards into prop area. - Propeller protection hoop tubing sheared in 4 locations - All (3) Carbon Fiber prop blades sheared; various lengths - MAIN frame appears bent under pilots' seat - Engine mounting structure appears bent; one carburetor knocked off - Instrument pod broken - Front wheel yoke appears bent - Bottom beacon; strobe lights bent - Engine damage unknown prior to inspection.			
AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)			
Airport Identifier: <u>KOCQ</u>		Distance From Airport Center: <u>3</u> SM	
Airport Name: <u>Baze Memorial</u>		Direction From Airport: <u>283</u> degrees MAG	
Proximity to Airport ☒ Off Airport/Airstrip ☐ On Airport ☐ On Airstrip		Airport Elevation: <u>604</u> 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)		VFR Approach (Check all that apply)	
☐ None ☐ PAR ☐ MLS ☐ Practice ☐ ADF/NDB ☐ Sideslip ☐ LDA ☐ GPS ☐ SDF ☐ ILS ☐ ASR ☐ Localizer ☐ VOR/TWOR ☐ Localizer Only ☐ Visual ☐ Unknown ☐ VOR/DME ☐ LOC-back course ☐ Contact ☐ TACAN ☐ RNAV ☐ Circling		☐ 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		Condition of Runway/Landing Surface (Check all that apply)	
Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft		☐ 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	
Runway/Landing Surface (Check all that apply)			
☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water ☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown ☐ Dirt ☐ Ice ☐ Snow			
FLIGHT ITINERARY INFORMATION			
Last Departure Point. Airport ID: <u>Private</u> City: <u>Abbeville</u> State: <u>WI</u> Country: <u>USA</u>		Time of Departure Time: <u>5:50</u> Time Zone: <u>Central</u>	
Destination Airport ID: <u>Private</u> City: <u>Abbeville</u> State: <u>WI</u> Country: <u>USA</u>		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) <u>15</u> Gallons		Fuel Type ☐ 80/87 ☐ 115/145 ☐ JP3 ☐ 100 Low Lead ☐ Jet A ☐ JP4 ☐ 100/130 ☒ Automotive ☐ JP5	
☒ Other, specify <u>91 octane</u>			
Other Services, if Any, Prior to Departure <u>None</u>			

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 			
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE			
Weather Observation Facility Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ NM Direction from Accident Site: _____ degrees MAG	Source of Weather Information <i>(Check all that apply)</i> ☒ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☐ Automated Report ☐ Unknown ☐ Commercial Weather Service (DUATS)	Method of Briefing <i>(Check all that apply)</i> ☐ 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 ☐ Dusk ☒ Day ☐ Night ☐ Dark Night ☐ Bright Night ☐ Not Reported	Visibility 12 miles	
Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered	Ceiling ☒ None (clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown	Restriction to Visibility <i>(Check all that apply)</i> ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown	
Lowest Cloud Condition Height ft AGL	Ceiling Height ft AGL		
Wind Direction ☒ Indicated: (Beacon) 170 degrees MAG ☐ Variable	Wind Speed Velocity: 3 KTS -or- ☐ Calm ☐ Light and Variable	Wind Gusts Velocity: _____ KTS ☐ Gusting ☒ Not Gusting	Type of Turbulence <i>(Check all that apply)</i> ☒ None ☐ In Clouds ☐ Clear Air ☐ Vicinity of Thunderstorm Severity of Turbulence ☐ Extreme ☐ Moderate ☐ Light ☐ Severe ☐ Moderate Chop
NOTAMs (D, L and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident NONE			
Temperature: 15 (C) or _____ (F) Altimeter Setting: 30.06 in HG or _____ MB Density Altitude: _____ ft Dew Point: _____ (C) or _____ (F)	 icing Forecast Amount ☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light Type ☐ Rime ☐ Clear ☐ Mixed icing Actual Amount ☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light Type ☐ Rime ☐ Clear ☐ Mixed		Type of Precipitation <i>(Check all that apply)</i> ☐ None ☐ Drizzle ☐ Rain ☐ Ice Pellets ☐ Snow ☐ Snow Pellets ☐ Hail ☐ Snow Grains ☐ Rain Showers ☐ Ice Crystals ☐ Freezing Rain ☐ Ice Pellets Shower ☐ Snow 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>ROY</u> City: <u>ABRAMS</u> Middle Initial: <u>E</u> State: <u>WI</u> ZIP: <u>54313</u> Last Name: <u>CARTWRIGHT</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>57</u> Date of Birth: <u>mm/dd/yyyy</u> Certificate Number: <u>mm/dd/yyyy</u>											
Degree of Injury ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☒ Serious		Seat Occupied ☐ Left ☒ Front ☐ Unknown ☐ Right ☐ Rear ☐ Single ☐ Center		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>mm/dd/yyyy</u>					
Medical Certificate Limitations											
Medical Certificate Waivers											
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>06/25/2011</u> <u>mm/dd/yyyy</u>				Flight Review Aircraft Make: <u>POWRACHUTE PPC</u> Model: <u>AIR WOLF 912 ULS</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 <u>SPORT PILOT</u>						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
Total Time			159.2				Actual	Simulated			
Pilot in Command (PIC)			157.2								
Time as Instructor			-0-								
This Make/Model											
Last 90 Days			10.2								
Last 30 Days			9.2								
Last 24 Hours			1.2								

PILOT "B" INFORMATION																																																																																																			
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Pilot "B" Identification First Name: _____ Middle Initial: _____ Last Name: _____ City: _____ State: _____ ZIP: _____ 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 ☐ Private ☐ Flight Instructor ☐ Recreational ☐ Commercial ☐ Sport ☐ Airline Transport ☐ Flight Engineer ☐ Foreign ☐ 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) <i>(Check all that apply)</i> ☐ None ☐ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea		Other Aircraft Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airship ☐ Free Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift		Instrument Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airplane ☐ Helicopter ☐ Powered Lift		Instructor Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Glider ☐ Sport																																																																																													
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<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="width: 20%;">Flight Time (enter appropriate number of hours in each box)</th> <th rowspan="2" style="width: 10%;">All Aircraft</th> <th rowspan="2" style="width: 10%;">This Make & Model</th> <th rowspan="2" style="width: 10%;">Airplane Single Engine</th> <th rowspan="2" style="width: 10%;">Airplane Multiengine</th> <th rowspan="2" style="width: 10%;">Night</th> <th colspan="2" style="width: 15%;">Instrument</th> <th rowspan="2" style="width: 10%;">Rotorcraft</th> <th rowspan="2" style="width: 10%;">Glider</th> <th rowspan="2" style="width: 10%;">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> </thead> <tbody> <tr> <td>Total Time</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot in Command (PIC)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Time as Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>This Make/Model</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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											Pilot in Command (PIC)											Time as Instructor											This Make/Model											Last 90 Days											Last 30 Days											Last 24 Hours										
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Last 24 Hours																																																																																																			

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)																
Pilot Name and Address						Degree of Injury										
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal								
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown								
Last Name: _____		Country: _____				☐ Serious										
Pilot Certificate(s) (Check all that apply)						Seat Occupied										
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer								
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military								
☐ Foreign																
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front								
						☐ Right		☐ Rear								
						☐ Center		☐ Single								
								☐ Unknown								
Pilot Name and Address						Degree of Injury										
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal								
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown								
Last Name: _____		Country: _____				☐ Serious										
Pilot Certificate(s) (Check all that apply)						Seat Occupied										
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer								
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military								
☐ Foreign																
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front								
						☐ Right		☐ Rear								
						☐ Center		☐ Single								
								☐ Unknown								
Pilot Name and Address						Degree of Injury										
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal								
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown								
Last Name: _____		Country: _____				☐ Serious										
Pilot Certificate(s) (Check all that apply)						Seat Occupied										
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer								
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military								
☐ Foreign																
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front								
						☐ Right		☐ Rear								
						☐ Center		☐ Single								
								☐ Unknown								
PASSENGER(S) / OTHER PERSONNEL (Include flight attendants; continue on separate sheet if necessary)						Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown
Name and Address																
First Name: <u>MARK</u>		City: <u>GREEN BAY</u>		State: <u>WI</u> ZIP: <u>54313</u>		<u>Rear</u>	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: <u>A</u>		State: <u>WI</u>		ZIP: <u>54313</u>			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: <u>PETERSON</u>		Country: <u>USA</u>					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____ State: _____ ZIP: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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.

See attached statements:

Attachment 1 - Roy Cartwright Statement
on June 30, 2011 Accident

Attachment 2 - Roy Cartwright Statement
on relevant part of
June 25, 2011 BFR

Attachment 3 - MARK PETERSON
Statement on June 30, 2011
Accident

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

Operator/Owner Safety Recommendation

See Attachment 4 - Recommendation
by Pilot and Owner.

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 <u>07/12/2011</u> (mm/dd/yyyy)	Signature and Name of Pilot/Operator Signature: <u>[REDACTED]</u> Type or Print Name: <u>ROY E. CARTWRIGHT</u>
Signature and Name of Person Filing Report if Other than Pilot/Operator Signature: <u>[REDACTED]</u> Type or Print Name: <u>MARK PETERSON</u> Title: <u>MANAGING MEMBER - M&M ADVENTURES, LLC</u>	

FOR NTSB USE ONLY

NTSB Accident/Incident No. CEN11CA453	Reviewed by NTSB Regional Office West Chicago, IL	Name of Investigator J. Brannen	Date Report Received 7/26/2011
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ATTACHMENT 2

Roy Cartwright statement regarding N734MP Powered Parachute Accident on June 30, 2011

Wednesday PM, June 29, 2011:

1. Received chute from PD (Performance Design) morning of June 29, 2011
2. I called PD earlier that day to review instructions. Printed instructions.
3. I attached chute using PD instructions.
4. Attached steering lines using guide provided by PD.
5. Inspected lines and chute, including cells/line attachments/stitching.
6. Attached with 1 #6 Delta at each Riser connection bar; i.e. two connections for right side and two connections for left side
7. Attached with 1 #6 Delta and 1 #6 Oval on top of risers where they connect to chute lines – on all 4 positions.
8. All connections made using Rapide link Mallion connectors.
9. When initial chute trim was set, it was set to be able to allow additional 3-4" of steering line to be release if chute needs more line to be neutral. It did not need adjustment
10. Packed up chute and went to Airport. (KOCQ – Bake Memorial in Oconto, WI)
11. Winds were ESE 10-12 mph when we arrived.
12. We waited for ground level winds to drop to 6 mph by measuring with Kestrel wind meter. Also called WXBrief. Sent up helium balloon before flight.
13. When winds died down we laid out chuted and taxied into wind. Normal kite up. Checked for neutral settings on chute and chute flew normal and initial trim settings appeared to be right on.
14. When kited up, the chute inflated properly, steering lines were neutral and working properly.
15. Bagged chute and returned to beginning of runway.
16. Laid out chute, and Mark went to far end of runway to take pictures of take-off.
17. Kited chute and made normal take off into wind.
18. When in flight, the climb rate, level flight RPM, all the engine monitoring systems were normal, pressures were good. Plane hung low on right side causing excess left steering for trim. Landed after approximately 1 hour flight.
19. After landing, packed up chute and removed 1 Delta each from left side top of risers. (i.e. a/b lines and c/d lines). This meant shortening left side by 1 #6 Delta Mallion Rapide link.
20. Took off again. The plane flew much better. Some right steering required, but not much. Chute looked good, neutral, and responsive.
21. Landed after approximately ½ hour. Good flight.
22. Bagged chute and taxied to trailer.
23. Did post flight inspection for leaks. None found.

Thursday AM, June 30, 2011 5:30AM:

1. Light SE winds, sent up helium balloon prior to flight.
2. Flew from my house near Oconto.
3. Laid out and inspected chute, pre-flight, called weather brief. (WXbrief)
4. Took off and chute rotated 180 degree; got caught in prop wash.
5. Returned chute and plane to end of runway to take off into wind.
6. Normal take-off and flight to Oconto airport. Flew over airport. Monitoring EIS – all flight monitors in spec. Slight right steering input to remain straight. Left airport flying west.
7. At 2.5 NM west of airport, performed an in- flight flare and released flare; plane moved up and back down properly.
8. Repeated flare, releasing more slowly to avoid diving at approximately 75' when plane chute stalled. Released flare, analyzed chute – all cells were open and only option was to go to full throttle. The chute remained open (all cells were open) overhead (not locked out). The chute was slightly back.
9. The aircraft began descending more rapidly; I went to full throttle and released trim locks totally (steering lines 3-4" past neutral) to try to fill chute with air.
10. At this point, I rode to the ground. Not straight down but at an angle that caused the front of the chute frame to hit hard. Rear wheels hit hard, slamming front wheel into ground. I realized I had back damage & used my phone to direct emergency crews to find me. I shattered my L1 vertebrae and have full paralysis in my pelvis, and partial paralysis in my left leg and major paralysis in my right leg.

[REDACTED]
Roy E. Cartwright.
Sport Pilot Certificate [REDACTED]

Date: 7-12-2011

ATTACHMENT 2

Roy Cartwright statement regarding Bi-annual flight review procedure in relation to the PPC accident on June 30, 2011 involving N734MP.

Prior to all of this, I had my BFR with Sean Curry on June 25, 2011 at Mark's Park in New Berlin Wisconsin.

We discussed the very maneuver I described in items 7 & 8 on the June 30, 2011 statement regarding N734MP Powered Parachute accident, i.e. trim pulled in on one side, full flare and fast release and full flare and slow release, and when we flew, we practiced the maneuver. First, I reviewed chute trim with Sean and he agreed that what I referred to was neutral chute trim. Secondly, I pulled in what I believed to be maximum flying trim in situations. Then, I flared in flight and released as described in my account. Sean said that everything I had done could not cause a stall.

When it happened, I was dumbfounded and could not understand how or what happened. Except to describe it as a stall. Winds were low, I did not fly in any rotors or wake turbulence.


Roy E. Cartwright
Sport Pilot Certificate 

Date: 7-12-2011

N734MP Incident report by Mark Peterson, Managing Member of M&M
Adventures, LLC – Owner of Powrachute PPC N734MP

6/30/2011

1. Arrived at Roy's about 5:10AM. Roy went thru preflight checklist and then warmed up engine. He also got a weather briefing, and launched a helium balloon to check winds higher up; very little wind as the balloon went up with only a slight drift toward NW. We rolled PPC into field east of driveway, where Roy laid out & inspected chute. After inspection, we got into PPC, got headsets and Helmets on, harnessed up seat belts & started kiting roll. First kiting did not work; chute flipped from right to left. Aborted take-off and straightened chute and went back to start point. Re-laid out and inspected chute and lines. Chute kited up fine on next attempt, and we took off.
2. Departed REC's field at approx. 5:50AM
3. Flew East across Hwy 41, and then turned North/northeast toward Oconto..
4. Elevations were varied during flight; turns made in both directions (L&R) with no issues. PPC was flying level and straight. Near the Oconto airport, we turned west.
5. About 2+ miles west of airport, Roy demonstrated the flare techniques he had gone thru at his BFR earlier that week; first a full leg flare & pop release, then a full leg flare with gradual release. During this time, our incident started. My first indication was when Roy exclaimed "What's happening?" I looked up at the chute, and saw it was slightly behind us (maybe 80-85 degrees vs directly overhead at 90 degrees), but level and all cells appeared to be fully inflated. I heard engine RPM's increase, and saw we were headed toward the ground at a fairly steep angle of descent.
6. Hit ground with back of airframe and wheels first, and then front seat pivoted to ground. Don't believe we rolled forward at all; just stuck to ground in the alfalfa field. Time was approx. 6:30AM.
7. Roy was hurt. Got out of seat & helped Roy get out his cellphone; Roy unable to move arms or legs. Dialed Joyce; Roy talked to tell her where we were. Cut conversation short and said we'd need 911. Called 911 & put Roy on to tell where we were. Then, took phone and talked to 911; headed to road to meet them.
8. Sheriff deputy showed up with rescue squad close behind; directed them out to Roy. Soon, more responders showed up along with another sheriff deputy. May have been yet another sheriff dept. rep there, but not sure. Someone had a camera and think they took some pictures. First responders worked on securing Roy to a small backboard, and then rotated him out of seat onto a full backboard. Then, loaded backboard onto a Gator type vehicle to transport Roy to road, where 2 rescue vehicles were waiting.
9. Sheriff deputy & 2 first responders helped me bag up chute so it would not catch any wind and try to pull cart away. When bagged, we hung chute bag onto side of PPC.
10. Sheriff deputy advised they would contact FAA

11. Went to St Vincent's with Joyce; arrived approx. 8AM. Roy was in ER and getting evaluations. Moved him up to ICU about 10:30AM.
12. Called Brad Peterson (my son) approx. 11 AM, he contacted Arron Peterson (my other son) & also Mary Peterson (my spouse).
13. We saw Roy in his room (#9 in ICU on 6th floor). Once he was secured, I called Brad to get a ride up to Roy's place to pick up my truck.
14. Arron Peterson called NTSB (WI rep in Washington, DC – [REDACTED] at 11:55AM. Call lasted 11 minutes; NTSB rep advised Arron that if no fatality that they would not investigate, but that they would contact FAA. NTSB rep contacted Milwaukee FSDO.
15. FAA FSDO of Milwaukee called my cell phone at 12:30PM. [REDACTED] Inspector Michael Monroe. I did not notice call come in, but saw message later.
16. Mike Demuth called my house at 12:32 pm; Talked to Mary Peterson. Offered help if needed.
17. 1:02PM – I called Oconto Co Sheriff [REDACTED] to determine who owned field. They advised it was Dave Matravers, [REDACTED]. Sheriff Dept. advised that FAA had inspected crash already.
18. I called FAA [REDACTED] was transferred to Milwaukee FSDO; asked if I could move PPC. Advised that no record had been received yet of FAA inspecting PPC, so cannot move. Asked if I could cover with a tarp. Was advised I could cover with tarp.
19. 1:21PM: Brad Peterson & I called farmer (Dave Matravers [REDACTED] Told him who I was and nature of call was about crash. Traveled to his farm & met him at his house. All went to crash site approx. a mile away. Brad & I covered PPC with brown tarp. There were police yellow ribbons on PPC at time; I took 4 pictures. We then returned home to Green Bay.
20. At 3:10PM, Bob Gay of Milwaukee FSDO called my house. Mary gave him my cell number.
21. At 3:11PM, Bob Gay called me on cell. (His number was [REDACTED]. He advised he was an FAA inspector, and that he had been to the crash site. Asked who moved chute. Advised him that I had bagged chute with Sheriff deputy & first responders – out of concern that an impending front may carry PPC away from crash site. He said OK. He advised he had started taking chute off PPC, but didn't have tools to complete. He said he had been in Door County that morning & on way to Shawano County when he got call to investigate our crash site. He asked who pilot was and where he was and asked if I was a passenger. Told him Roy's name, and that he was in St Vincent's & I was passenger. He asked if I would call Mike Batson 7/5 AM if Roy was still in hospital. Said I would. I advised Bob Gay that I had called Milwaukee FSDO earlier, and had received permission to tarp PPC; from which task I had just returned to home. He advised he was giving me permission to move the PPC, but to keep it secured and to not touch the chute; that Mike Batson would likely want to see it. I told him we would move PPC to Roy's barn and secure it there. Also, that we would be careful not to touch anything beyond strapping the PPC to trailer.

22. At 3:30PM, called Mike Demuth for help in moving PPC, as I believed he would be best able to help account for all parts and know how best to lift it. Got things ready & then picked up Mike at his house approx. 4:20PM. Then, went to Roy's to get flatbed trailer. Then went to farmer's house, and then farmer and Mike Demuth & I went to crash site. Farmer's step son was cutting alfalfa to make our access easier. We backed trailer close to PPC and farmer loaded it with a tractor. We then secured PPC with straps and pulled it clear of crash site. Then, we searched for all the pieces that had come off. Found warp drive prop pieces and hoop & frame pieces near PPC, except for one piece. Mike determined what approx. size it should be and that it would have an attachment connector on one end. Eventually, we found this under the tarp on the back seat of PPC. I then paid farmer for his help & we transported PPC to Roy's place, where we stored it in barn, still on the flatbed trailer.
23. Returned home about 7PM, showered & went up to hospital to see Roy. His Dr. had advised him/Joyce that he would be doing surgery in AM on 7/1.


Mark Peterson, Managing Member
M&M Adventures, LLC

Green Bay, WI 54313

Date: July 12, 2011

ATTACHMENT 4

Recommendation (How could this accident have been prevented?)
NTSB Report on June 30, 2011 Accident involving N734MP

We believe our accident was a result of loss of control following a metastable stall of the chute. From all we know & have been taught, it should not be possible to induce a metastable stall with the actions we took and with a properly rigged chute/cart.

If the NTSB & FAA investigations also conclude we experienced a metastable stall, we recommend the following actions:

1. FAA meet with the chute manufacturer and PPC manufacturers to discuss this accident & implement methods to prevent such a stall when using commonly taught flare techniques. It is known in the industry that at least one manufacturer had already made rigging changes specifically when using this specific chute. We wish this had been known thruout the industry & that we had been aware of this.
2. Provide notice to other current & future users of this chute to alert them to the potential for such an incident so they can make rigging changes as determined appropriate to their PPCs to reduce this risk.
3. Evaluate training programs for PPC's to determine if any improvements regarding flare techniques could enhance flying safety of PPC's.
4. Re-evaluate the ASTM standards applicable to PPC manufacturing to see if any changes to them may help make PPC's less likely to experience such a metastable stall when being flown in the manner we did, which is being taught in at least several PPC training programs.

These recommendation are made with the hope that any resultant actions which can help reduce the risk for others to experience what we have, would be a valuable service to the PPC flying community.


Roy E. Cartwright
Sport Pilot 

Date: 7-10-2011


Mark Peterson, Managing Member
M & M Adventures, LLC
Owner: N734MP

Date: July 12, 2011