

7. OPERATOR NAME

FLORIDA BIPLANES, INC.

16. POWER PLANT MAKE/MODEL/SERIES

FRANKLIN 6V 350 SERIES

33. NARRATIVE

ON 02/06/2013 THE PILOT OF A HILLER UH-12B REGISTRATION N5072R, WAS PERFORMING AIR TOUR RIDES FOR FLORIDA BIPLANES, INC, AT MERRITT ISLAND AIRPORT (KCOI). THE FIRST 5 FLIGHTS WERE UNEVENTFUL BUT ON THE 6TH FLIGHT THE HELICOPTER LOST POWER ON CLIMBOUT AND WAS FORCED TO DO AN EMERGENCY LANDING.

THE INCIDENT FLIGHT WAS AT 1800LT - ON WARM UP, NO ABNORMALITIES OR UNUSUAL SOUNDS OR VIBRATIONS WERE NOTED. DURING TAKEOFF ALL TEMPS & PRESSURES WERE CONFIRMED NORMAL AND POWER APPEARED NORMAL. THE HOVER WAS STABLE WITH NOTHING UNUSUAL NOTED. THE DEPARTURE WAS NORMAL & SMOOTH WITH A CHECK PRIOR TO THE INCIDENT.

WHILE CLIMBING THROUGH APPROXIMATELY 75 TO 100 FEET, THE PILOT HEARD A POPPING SOUND AND THE ENGINE LOST POWER. TO MAINTAIN ROTOR RPM THE COLLECTIVE WAS LOWERED AND RIGHT PEDAL PRESSURE WAS APPLIED TO COUNTER A LEFT YAW THAT OCCURRED. UPON APPROACHING THE GROUND BACK PRESSURE WAS APPLIED TO THE CYCLIC TO REDUCE THE AIRSPEED AND PREPARE FOR GROUND CONTACT. UNABLE TO OBTAIN FLIGHT DIRECTION HEADING CONTROL WITH RIGHT RUDDER PRESSURE, THE PILOT APPLIED FORWARD CYCLIC TO LEVEL THE AIRCRAFT, PLANNING FOR A LEVEL SHIP LANDING, AND PULLED COLLECTIVE PRIOR TO GROUND CONTACT.

GROUND CONTACT WAS MADE WITH A SLIGHT FORWARD AIRSPEED & A SLIGHT LEFT YAW DURING THE GROUND RUN. THE LEFT SKID COLLAPSED AT THE END OF THE SLIDE. AT THIS POINT THE PILOT REACHED DOWN AND PULLED & CONFIRMED ALL ENGINE CONTROLS WERE CLOSED.

THE PILOT CHECKED ON THE CONDITION OF THE PASSENGERS. BECAUSE THE MAIN ROTOR BLADES WERE STILL TURNING, THE PILOT INSTRUCTED BOTH OCCUPANTS TO REMAIN BELTED IN THEIR SEATS UNTIL THE AIRCRAFT STABILIZED. THE PILOT THEN TURNED OFF THE MASTER SWITCH AND ONCE THE AIRCRAFT HAD STABILIZED & THE ROTORS HAD STOPPED ALL THREE LEFT THE AIRCRAFT AND WALKED CLEAR.

43. BRIEF EXPLANATION OF ISSUES INVOLVED

CRASH SITE WAS VISITED AND ALL AIRCRAFT RECORDS APPEARED TO BE IN COMPLIANCE

THE AIRCRAFT WAS INSPECTED AND SHOWED DAMAGE TO THE ENGINE MOUNTS, MAIN

ROTOR BLADES, LEFT LANDING GEAR SKID, TAIL ROTOR DRIVE SHAFTS, TAIL BOOM, TAIL ROTOR TRANSMISSION AND TAIL ROTOR BLADES HAD SEPARATED FROM THE TAIL BOOM.

INSPECTED ENGINE AND IT APPEARED TO HAVE NO APPARENT DAMAGE. DISCONNECTED THE FUEL SUPPLY LINE FROM THE ELECTRIC FUEL PUMP TO THE CARBURETOR AND RAN THE ELECTRIC FUEL PUMP TO DETERMINE IF FUEL WAS BEING SUPPLIED TO THE CARBURETOR, NO FUEL WAS OBSERVED COMING OUT OF THE LINE. DISCONNECTED THE FUEL SUPPLY LINE FROM THE GASCOLATOR TO THE ELECTRIC FUEL PUMP & FOUND NO FUEL WAS FOUND INSIDE THE LINE, FITTING AT THE GASCOLATOR WAS DRY WHILE THE END OF THE LINE AT THE PUMP WAS WET. REMOVED FUEL PUMP FILTER TO CHECK FOR OBSTRUCTION FINDING NONE. VERIFIED FUEL WAS PRESENT AT GASCOLATOR DRAIN, FINDING FUEL COMING OUT OF THE GASCOLATOR DRAIN. DISCOVERED THAT THE FUEL SUPPLY LINE FROM THE GASCOLATOR TO THE MECHANICAL FUEL PUMP WAS NOT ATTACHED TO THE GASCOLATOR. DETERMINED THAT THE FUEL SUPPLY LINE AN FITTING HAD BROKEN OFF WHERE IT ATTACHES TO THE GASCOLATOR.

INSTALLED A CAP LINE AT THE GASCOLATOR CONNECTOR WHERE THE AN FITTING WAS BROKEN OFF TO TEST THE ELECTRIC PUMP TO SUPPLY FUEL TO THE CARBURETOR. TURNED ON THE ELECTRICAL PUMP AND FUEL WAS OBSERVED COMING OUT OF THE CARBURETOR INTAKE FUEL LINE, DEMONSTRATING THE ABILITY OF THE ELECTRIC FUEL PUMP.

SUMMARY:

EVIDENCE INDICATES THAT WHEN THE AN FITTING BROKE OFF, THE ENGINE COUGHED (LOUD POP HEARD BY THE PILOT), THE ELECTRIC PUMP , COULD NOT GET FUEL FROM THE GASCOLATOR TO THE CARBURETOR. THE ELECTRIC PUMP WAS ONLY SUCKING AIR FROM THE FITTING ATTACH POINT WHERE IT HAD BROKEN OFF, CAUSING THE ENGINE TO QUIT DUE TO FUEL STARVATION.