



Educate - Safety – Training

P.R.A. SAFETY COMMUNIQUE 2013-01

On May 12, 2013 a Monarch gyroplane experienced a pitch pivot bolt failure.

The gyro had prerotated and was lifting the nose wheel when a snap/bang was heard and the takeoff aborted.

Inspection of the machine revealed two damaged propeller blades and a bent keel tube. Further investigation revealed the pitch pivot bolt, AN6-40, had separated at approximately one third of the grip length from the head of the bolt.



The cause of the bolt failure has not been determined; however, P.R.A. recommends that gyroplane owners/operators inspect the pitch and/or roll pivot bolts for discoloration around the pitch pivot bolt head and nut during each preflight for signs of unusual powder. If found you should, before further flight, remove the bolt and inspect its condition. Elongation, cracking, circular markings, etc. If any defect is found please replace the bolt with a known serviceable or new bolt and install in accordance with the manufacturers instructions.

It is also suggested that during normal maintenance, fifty hour, one hundred hour or annual conditional inspections that a torque wrench be used to verify that when the correct torque is applied that the bolt will not rotate in the hole. If the bolt does rotate, remove the bolt and check its condition. Replace as necessary.