

Engine Observations

The engine was examined at the facilities of Hanger 6 Inc. (Hillsboro, Ohio) on 8/24/2017. The engine was separated from the airframe and mounted nose down on an engine stand by the recovery facility. The engine had a large hole located at the top of the case inboard of the number four cylinder. The case was cracked back to the top left engine mount including the accessory case. All the accessories were removed and the engine was disassembled. The number four connecting rod was found to have failed at the small end bushing. The other three connecting rod small end bushing were found displaced forward from their normal positions. The number three connecting rod small end bushing was free to move by hand. Broken pieces of the case, connecting rod and bushing was found in the oil sump. The oil pickup screen was found free of debris. The sparkplugs appeared normal as compared to the Champion Aviation Check a Plug Chart AV-27. The fuel injectors were found clear. Both magnetos showed no signs of visual damage and sparked at all leads. No visual damaged was noted on either of the vacuum pumps or fuel pump. All engine controls were previously disconnected by the recovery facility with no mention of any discontinuity.