

Mechanics: Manage Risks to Ensure Safety

When it comes to general aviation, much of the NTSB's focus is on the pilots. One of its recent Safety Alerts, however, focused primarily on mechanics and their role in preventing accidents. According to the Board, "Mistakes made while performing aircraft maintenance and inspection procedures have led to in-flight emergencies and fatal accidents. System or component failures are among the most common defining events for fatal accidents across various sectors of general aviation."

The Board cited three GA accidents, two of which resulted in fatalities. In one, improper procedures were used when mating an A36 Bonanza engine's main bearing bosses, resulting a failed crankshaft. In another, an unsecured clamp resulted in separation of a Piper PA-46-310P Malibu's induction hose, failing three cylinders. And a Piper PA-24-250 Comanche's stabilator trim pushrod separated in-flight, exhibiting evidence of prolonged inadequate maintenance.

Investigation revealed the following recommendations have merit for general aviation mechanics:

- Sound risk management prevents errors;
- Follow instructions, ask for help;
- Have another qualified person inspect critical items;
- Be thorough on routine tasks;
- Don't defer safety of flight items;
- Double-check all components "touched" during maintenance; and
- Understand fatigue, strive to eliminate contributors.

