Aircraft Maintenance Safety Stats and Facts

FACTS

1. Poor aviation maintenance, maintenance errors and maintenance negligence are commonly found to be the top three causes of aviation maintenance accidents.
2. Fatigue and Sleepiness: Irregular hours of work can mean mechanics may not get all the sleep they need. Coupled with long or strenuous maintenance, this can lead to inefficient and unthorough work.
3. Stress: Personal and work life can be stressful and have people thinking about things other than the task at hand. Distraction from stress can be dangerous if a technician isn’t paying attention to a detailed maintenance operation.
4. Medical Problems: Health problems like gastrointestinal and cardiovascular issues can arise from interruptions caused by irregular work hours.
5. Age: Older employees may have a more difficult time adjusting to irregular work hours or a changing schedule.

STATS

- For the ten-year period 2002 to 2011, 0.6 fatal accidents happened per one million flights globally, 0.4 per million hours flown, 22.0 fatalities per one million flights or 12.7 per million hours flown.
- Noncertified airframe and powerplant (A&P) aircraft maintenance technicians (AMTs) performed maintenance on 1 out of 280 aircraft involved in maintenance-related accidents.

- A comprehensive study on general aviation accidents reported that maintenance-related crashes represented 15% of all accidents.
- Almost 12% of all aircraft accident reports cite a maintenance factor.
- When failure or malfunction of aircraft equipment is part of an accident or incident, one-third of these malfunctions relate to a maintenance error.
- Whenever engine delays are encountered, maintenance error accounts for nearly 50% of the causes.
- maintenance problems have contributed to 42% of fatal airline accidents in the United States (excluding the 9-11 terrorist attacks).