

# 3

## Aircraft Maintenance

**M**ANY PILOTS THINK OF THE LIFE EXPECTANCY OF THEIR AIRPLANE in two ways: the airframe is forever and the powerplant goes to its TBO (time between overhaul). Inherent in that belief is the assumption that the accessories are either indestructible or, at worst, good for the life of the engine. Nothing could be further from the truth. Certainly the closer an engine gets to its TBO, the greater the scrutiny it should receive in all phases of operation. Most engines have TBOs ranging between 1,200 and 2,000 hours, but other aircraft components may have significantly shorter life spans.

### TYPICAL COMPONENT LIFE EXPECTANCIES

Most propellers, for instance, are rated at less than engine TBO, commonly 1,500 hours. Fuel boost pumps range from 700–1,500 hours. Replacing the vacuum pump system filter every 100 hours, something aircraft owners rarely do, will help a dry vacuum pump to run from 400–1,000 hours; the wet type pump typically has a somewhat longer life. Mufflers frequently do not go beyond 1,000 hours, and alternators, which have a nasty habit of going out while flying in the clouds, generally give up the ghost around 1,200 hours.

Component life expectancy varies among manufacturers and is significantly influenced by the way you operate and maintain your aircraft. The trick is to have a fair idea how long these components should last and begin to cast a suspicious eye