

## Chapter Three

part and maintain an effective quality control program. Some PMA-seeking company officials think the process is far too demanding. One complained it took three years of processing after submitting all required data to the FAA.

### Choosing the Best Parts for You

Despite all the apparent questions and concerns, there are some fairly simple guidelines the aircraft owner can follow. Above all, the single most important step you can take toward assuring optimum benefit for both your checking account and your airplane's condition is to work with an established, reputable repair facility. There is no doubt you can save some money by using PMA parts, but refer to the manufacturer's warranty first. If it says OEM parts only, then perhaps you are better off waiting until the warranty expires before using anything else. Never use unauthorized parts; it voids warranties, and when it comes to having maintenance done, shop around for the best price, but be cautious of the lowest bidder.

## PREVENTIVE MAINTENANCE

Regular preventive maintenance will keep most problems in check. It is defined in Appendix A to FAR Part 43—Major Alterations, Major Repairs, and Preventive Maintenance—as “Simple preservation and the replacement of small standard parts not involving complex assemblies.” It is corrective action taken before it becomes necessary to make more complex repairs.

Preventive maintenance, as outlined in FAR 43 shown in Table 3-1, may be accomplished by a certificated pilot, who is the owner or operator of an aircraft, not used in air carrier service. Most items allowed are easily accomplished by anyone with a basic mechanical aptitude, but a good rule of thumb is the following: If you aren't sure what you are doing, don't do it. Fortunately, the rule does not apply to home maintenance projects such as rewiring a microwave or even your house. You are free to destroy those things at your leisure, as it is less complicated to exit a burning house than an airborne aircraft.

## UNSCHEDULED MAINTENANCE

At some point, no matter how good the preventive maintenance, no matter how much you baby your airplane, you are going to need the services of your local, friendly airframe and powerplant mechanic. If there is one thing at which a mechanic cringes, it's a pilot who says “Plane don't work right; fix it.”

One hapless pilot left a note on his aircraft, saying the engine wasn't working right, and left it on the ramp in front of the shop. He returned from a business trip and found a bill of \$2,000 for various engine-related work, none of which included fixing the problem he was originally concerned about.

It is important to be able to accurately define the problem and its location for the mechanic to provide quick, efficient, and reasonably priced work. The statement of the problem should reflect exactly what symptoms you observed and under what conditions