BRAKE SYSTEM BASICS

The brake systems aboard most personal airplanes aren't very complicated. At right is a schematic diagram for the Cirrus SR22, but the same basic components and layout are present in virtually all piston-powered airplanes. Some systems may include check valves to prevent simultaneous braking applied to both sets of pedals from canceling each other out. Don't laugh; it's happened.

Only when moving up to turbine equipment do things like multiple hydraulic or anti-lock braking systems come into play.

Items to check during preflight include the brake fluid reservoir, caliper assemblies on each wheel and the brake disks (rotors) themselves.

Once seated at the controls, verify full, consistent brake-pedal travel. If one pedal or another is "softer" than the others, it may mean a slow leak in the system. Ground the airplane and consult a mechanic if a pedal collapses completely when braking is applied.

Oh, and never trust the parking brake, especially when the engine is running.