



“Serving to Serve Again”

### Performance Comparison

The upgrade from the O-470 230 horsepower engine to an O-550 285 horsepower engine produces an impressive performance improvement. Take this 1962 180 for example. With its original engine it climbs 700 feet a minute and cruised at 120 knots with a maximum speed of 125 knots. Texas Skyways installed an O-550 engine on this same plane.

Here is a takeoff. Notice how quickly the plane is off the ground and look at that rate of climb, 1500 feet a minute. As the Cessna levels off, full power is applied. Note that air speed indicator, 160 knots. To better demonstrate the performance difference we selected two similarly equipped Cessna 182s. This is a 1971 182 with a factory installed O-470 engine. This one is a 1977 Cessna 182 with a Texas Skyways installed Continental O-550 engine. Let's watch the take off. The O-470 will go first. It lifts off the ground at 800 feet. Now, the O-550 Cessna. It is off the ground in just 400 feet. Side by side take off is probably the most dramatic. The same two Cessnas are positioned next to each other for a parallel take off, the Texas Skyways Cessna is on the right, here we go. See how early the Texas Skyways Cessna left the ground and notice the difference in that rate of climb.

Equally impressive is the cruise. We have two Cessnas flying at the same altitude, same power settings, same pay load, and amount of fuel on board. The Texas Skyways Cessna with the O-550 engine is on the left.

Jack: It's top speed, if we leave it full throttle and hold it about 2600 RPM, it's top speed is gonna be somewhere around 170 knots. The 550 conversion we pick up 20 to maybe as much as 24 knots.