



Toe Brake or Hand Brake? Which is better July 2020

What are the benefits of the Hand Brake?

- If you are 5' 2" tall, it is difficult to reach the toe brakes and easy to reach the hand brake.
- The hand brake is easier to maintain as it has only one master cylinder.
- The pilot does not need to caution his passengers to keep their feet off of the rudder pedals during takeoff and landings.

What are the benefits to Toe brakes?

- You can make tighter turns, but the hand brake also turns in a short radius.
- When flying the tail wheel Bristell, Toe brakes are occasionally necessary for directional control.
- Pilots that are familiar with Toe brakes will not need to learn the proper procedure for using the hand brake.
- For a pilot with some hand abnormality, the Toe brakes would be better.

Can a short pilot modify the plane so they can reach the Toe brakes?

- YES We can add a 6 inch box behind the pilots seat to allow 5' 2" pilots to reach the toe brakes.

Which brake system is better for the nose wheel steering Bristell?

- They both work great.
- I am 5' 6" tall. I place a 4" block under the bottom of the seat cushion. I put a 2" flotation device behind the seat to get me closer to the rudder pedals. I sit on a 2" Oregon Aero seat cushion so my eyes are 4 inches above the glare shield. I adjust the rudder pedals to their full forward position. I make consistently soft landings because I can see over the nose and reach the rudder pedals during landings.
- If I expect to be in the air for more than 3 hours, I sometimes set the rudder pedals in the center so I can stretch my legs. Never adjust the rudder pedals during flight as they sometimes will not lock in the new position.

What is the best way of using the rudder pedals during nose wheel steering?

- The Bristell has dual teleflexing cables for steering.
- It is important not to apply rudder pressure until the plane is rolling.
- The cables can break if the pilot applies pressure before the plane starts rolling.
- The cables can become disconnected if the tow bar is moved to the fullest turning position.

Lou Mancuso, "The Landing Doctor"