



## **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"