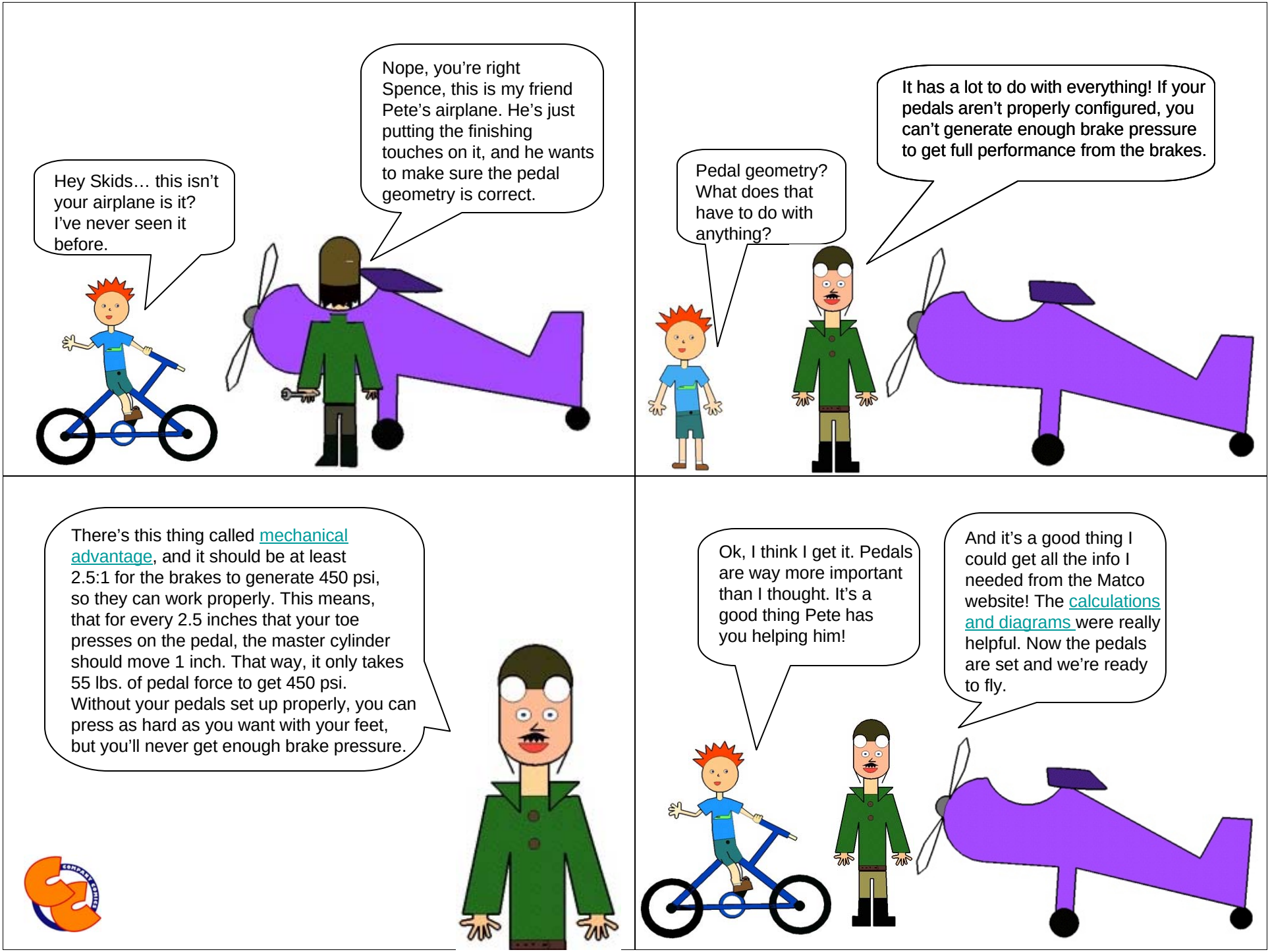
Hey Skids… this isn't your airplane is it? I've never seen it before.
Nope, you're right Spence, this is my friend Pete's airplane. He's just putting the finishing touches on it, and he wants to make sure the pedal geometry is correct.
Pedal geometry? What does that have to do with anything?
It has a lot to do with everything! If your pedals aren't properly configured, you can't generate enough brake pressure to get full performance from the brakes.
There's this thing called mechanical advantage, and it should be at least 2.5:1 for the brakes to generate 450 psi, so they can work properly. This means, that for every 2.5 inches that your toe presses on the pedal, the master cylinder should move 1 inch. That way, it only takes 55 lbs. of pedal force to get 450 psi. Without your pedals set up properly, you can press as hard as you want with your feet, but you'll never get enough brake pressure.
Ok, I think I get it. Pedals are way more important than I thought. It's a good thing Pete has you helping him!
And it's a good thing I could get all the info I needed from the Matco website! The calculations and diagrams were really helpful. Now the pedals are set and we're ready to fly.