



### **CONTRIBUTING FACTORS ADD UP**

**Pick a month: It's fairly easy to find at least one NTSB accident report for each of the following contributing factors, so here are some related and obvious questions you should consider:**

- Is the runway level or sloping? Runway slope makes a huge difference on ground roll.
- Is the runway surface soft or rough? You will not accelerate as efficiently from a bumpy gravel surface as you will off clean pavement.
- How tall is the grass? If it's too tall, you may never break free of the bonds of earth.
- Is the aircraft engine actually able to develop book-level power? If not, don't expect book performance on takeoff roll.
- Is it hot or is the airport at a higher altitude? Density altitude is a big factor in many short-field mishaps.

**You should think about all of these factors when looking at a short field. Take your time; walk the runway. Mud, dew, tall grass, a sandy spot—these can catch the plane at the most inopportune time. Meanwhile, trees, terrain and wind direction can create downdrafts that will ruin your day.**

**I recall landing at Fish Lake in Idaho only to discover that repairs to the grass airstrip had been made with coarse gravel that would have made great runaway truck ramp material. It was so loose it was hard to walk in. It definitely would grab a tire if you hit it. My takeoff roll included a dodge and weave to avoid these energy-sucking gravel patches, but the dodging and weaving took its toll on acceleration as well.**