

# A ROUGH LANDING<sup>1</sup>

By Steve Ferree

It was a beautiful June day in North Pole, Alaska. My small plane was located at a gravel air strip call Pecan Candy Sky Ranch. I decided to fly down to see old timer Ed the Mountain Man in Delta Junction which is 95 miles to the south. I filled my plane's fuel tank with gas and took off. I circled the airport twice for fun and climbed to 3,500 feet above the airport before heading to Ed's house.

The plane can climb at a rate of 720 feet per minute and it burns 7.2 gallons of fuel per minute while climbing. Once I reached 3,500 feet, I set the throttle so that the propeller rotated at 1,500 revolutions per minute.

**How many revolutions would occur in 8 minutes?**

At this rate, the plane flies at 110 miles per hour air speed. However, I was flying straight into a wind of 20 miles per hour which slowed the plane down in terms of how fast it was going based on ground speed (speed along the ground).

**Find the ground speed by subtracting the speed of the head winds from the air speed measured in the plane.**

**At this speed, how long does it take to fly to Ed's house?**

**Given that I took off at 11:40 am, about what time should I get to Ed's house?**



For a "seat of the pants," unlicensed pilot such as myself, I had to follow the road rather than use instruments. As I flew south, I saw several moose and one bear from the air.



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<sup>1</sup> Suggested Grades: 5-6 Skills: Subtraction, multiplication, and division with integers and decimals, & time

I could also see the tallest mountain in North America, Mount Denali rising majestically to 20,308 feet above sea level. The mountain was pushing up through clouds so pilots could see it from above but no one could see it from below. As always, it was covered in ice and snow. How beautiful – que bonito!



**If my altitude was 9,000 feet above sea level, the top of Denali is how high above my plane?**

As I approached Ed's house I dropped down to 150 feet above tree top-level. I made a pass over the gravel road in front of Ed's house to check for traffic because I planned on landing on the road and pulling into Ed's driveway. I was thinking about what I would say to Ed: "Surprise Ed – here I am!" as he looks at the plane in his driveway. I slowed my plane down to 50 miles per hour the slowest it can go before falling out of the sky.

Suddenly out of the left window I see a black Chevy pickup turn right in front of me. **PANIC, I AM GOING TO HIT THE CAR!** At this moment a better pilot would have pushed the throttle forward, increasing power, leveled the plane out and changed the flaps (the air brakes) so that the plane could pick up speed and stop the descent, but I didn't do that.



I did push the throttle to gain power but I forgot to level the plane and change the flaps (the air brakes). I ran out of air speed and the plane was going down. The good news is I was going very slow, and the pickup turned out of the way. I hit the ground coming to a stop on the nose of the airplane. It wasn't as bad as the plane in this photo, but it felt like it. Embarrassing!

Thankfully, I wasn't hurt and I did not hit the pickup. Ed came running down the road as I opened the door and staggered out of the plane. He saw me walking and started laughing saying "if you are able to walk away, it is a good landing." I grimaced thinking that this came from a guy with 2 twisted props on the wall of his hanger!

It cost \$1,287 to repair the plane not counting the sales tax of 8.35% which must be added to the \$1,287.

**Find the total cost to repair the plane.**