Jethro and the Home Video

The problem

Jethro was driving his pickup truck down a residential street one afternoon (speed limit 35mph) when he hit ice and ran into a telephone pole. Shortly thereafter, he was arrested and charged with speeding. You are investigating the case. Here are the facts so far:

1. Jethro never slowed down before hitting the pole. When he did hit the pole, his foot became wedged between the gas pedal and some debris, so that the wheels of his truck kept rotating at the rate that they were moving before he hit the pole.

2. Officer Battle, who was on helicopter traffic patrol, had been hovering above the scene of the accident. He was playing with some fancy equipment when Jethro began to slide off the road. According to Officer Battle, Jethro traveled 200 feet in 3 seconds.

3. Billy Bob was standing in his front yard at the time of the accident, making a home videotape of his little sister, Sissy, gargling to the tune of "Gilligan's Island." Later, while viewing the tape and preparing to send it to America's Funniest Home Videos, Billy Bob observed that the accident was recorded in the background of the videotape. He timed Sissy's performance to be 15 seconds long. Then by running the videotape in slow motion, he was able to count the 24-inch diameter tires of Jethro's truck rotating 101 times while Sissy gargled.

Your job is to evaluate the testimony of Officer Battle and the evidence from Billy Bob's tape to decide whether you would rather be a defense lawyer or a prosecutor for this case. Then write your case for court, being sure to explain what these two pieces of information indicate to the jury; that is, you need to show all your mathematics in the body of your discussion---as explained by an expert. If either piece of testimony, or both, fails to support your claim, indicate why you think that the witness is incorrect or unbelievable. You may be as creative as you wish as long as you do not contradict any information given and you do all math involved for both sides of the argument.