

"Yes Virginia, there is a Jesus."

It is truly heartwarming to know that millions of people around the world believe in Santa. Sure, most are less than four feet tall, but still it's amazing that so many believe in the big guy in the red suit. Consider the following:

Around the globe, today, live approximately two billion children (persons under 18). Santa doesn't visit all of them, of course. Subtracting the number of Muslim, Hindu, Jewish, or Buddhist children reduces Santa's Christmas Eve workload to 15 percent of the total, or 378 million children (according to the Population Reference Bureau). At an average (census) rate of 3.5 children per household, and presuming that there is at least one good child in each home, Santa must visit about 108 million homes.

Santa has about 31 hours of Christmas to work with, thanks to the different time zones and the rotation of the earth, assuming he travels east to west (which seems logical). This works out to 967.7 visits per second. That means that at each household with a good child, Santa has around 1/1000th of a second to park the sleigh, hop out, jump down the chimney, fill the stockings, distribute the remaining presents under the tree, eat whatever snacks have been left for him, and get back up the chimney, jump into the sleigh, and get on to the next house.

For the purposes of our calculations, we will assume that each of these 108 million stops is evenly distributed around the earth (which, of course, we know to be false). We're talking about a trip of 0.78 miles per household; a total trip of 75.5 million miles, not counting bathroom stops or breaks. To cover that ground in 31 hours, Santa's sleigh moves at 650 miles per second or 3,000 times the speed of sound. By comparison, the fastest man-made vehicle, the Ulysses space probe, moves at a poky 27.4 miles per second, and a conventional reindeer can run (at best) 15 miles per hour.

The payload of the sleigh adds another interesting element. Assuming that each child gets nothing more than a medium-sized Lego set (two pounds), the sleigh must carry over 500 thousand tons, not counting Santa himself. On land, a conventional reindeer can pull no more than 300 pounds. In air, even granting that the "flying" reindeer could pull 10 times the normal amount, the job can't be done with a mere eight or nine of them--Santa would need 360,000 of them. This increases the payload, not counting the weight of the sleigh, another 54,000 tons, or roughly seven times the weight of the Queen Elizabeth (the ship, not the monarch).

Six hundred thousand tons traveling at 650 miles per second creates enormous air resistance--this would heat up the reindeer in the same fashion as a spacecraft reentering the earth's atmosphere. The lead pair of reindeer would absorb 14.3 quintillion joules of energy per second each. In short, they would burst into flames almost instantaneously, exposing the reindeer behind them and creating deafening sonic booms in their wake. The entire reindeer team would be vaporized within 4.26 thousandths of a second, or right about the time Santa reached the fifth house on his trip.

Not that it matters, however, since Santa, as a result of accelerating from a dead stop to 650 miles per second in .001 seconds, would be subjected to centrifugal forces of 17,500 g's. A 250-pound Santa (which seems ludicrously slim) would be pinned to the back of the sleigh by 4,315,015 pounds of force, instantly crushing his bones and organs and reducing him to a quivering blob of pink goo.

While many adults have no problem believing in Santa, by comparison, the story of the little baby in the manger is relatively easy to believe. The life of Jesus Christ is a fact, recorded not only by biblical writers but by secular historians as well. Some historians declare that there is more evidence for the birth, death, and resurrection of Christ than there is evidence that Julius Caesar ever lived at all.

Even in the face of the written testimony of eyewitnesses, many people refuse to believe in Jesus. They consider him nothing more than a myth. But for those who believe with childlike faith, Jesus promised an inheritance of the kingdom of God (Mark 10:14).

Edited from Still More Hot Illustrations for Youth Talks by Wayne Rice.