

KINEMATICS

Unit 3 4 & 5 Dr. John P. Cise, Professor of Physics, Austin Community College, 1212

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Bill Warner, Who Set Speed Record on Motorcycle, Dies at 44

Bill Warner returned to the runway at the decommissioned Loring Air Force Base in Limestone, Me., on Sunday hoping to beat his world land speed record on a conventional motorcycle. **He had set the record — 311.945 miles per hour in 1.5 miles — at the base in 2011. This time he (((hoped to hit 300 m.p.h. in a mile or less)))**.



Bill Warner, left, in 2011.

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On Sunday he tried again to top his world land speed record. He died on a later run.

INTRODUCTION: As stated below he started from rest and reached 285 mph in 4000 ft..

QUESTIONS: (a) Convert 285 mph to ft/s. ? (b) Find acceleration in ft/s^2 ?
(c) Find time(starting from rest) to achieve 285 mph in 4000 ft.? Use: $X = V_{\text{average}} t$
(d) Find the time to reach 285 mph in 4000 ft. using $X = V_0 t + \frac{1}{2} a t^2$?

HINTS: $V^2 = V_0^2 + 2 a X$, 60 mph = 88 ft/s. , mile = 5280 ft.

ANSWERS: (a) 418 ft/s., (b) $\sim 21.84 \text{ ft/s}^2$, (c) 19.14 s. , (d) 19.14 s.

EXTRA EXTRA: Answer the same questions, but use the data on his 2011 record 0-311.945 mph in 1.5 miles?

As spectators looked on, Mr. Warner roared off on his blue Suzuki Hayabusa, a customized, fiberglass-swathed model muscled up with a 1,200-horsepower engine. **(((About 4,000 feet down the track, after he had hit 285 m.p.h.)))**, the motorcycle veered to the right — the direction drivers usually turn if something is awry — headed into the grass and fell on its side, tossing Mr. Warner. Their **speed had been so great that both man and machine slid, separately, for hundreds of feet.** Mr. Warner, though conscious after the crash, died a short time later at a hospital in Caribou, Me., said Tim Kelly, race director for the [Loring Timing Association](#), which administers land speed events at the base. Mr. Warner was 44.