

KINEMATICS

Units 4 & 5 Dr. John P. Cise, Professor of Physics, Austin Com. Col.

1212 Rio Grande St., Austin Tx 78701 jpcise@austinctx.edu & NYTimes January 11, 2013 by A.G. Sulzberger

Two Men, One Sky: A Flight to the Finish..475 miles in 11 hrs



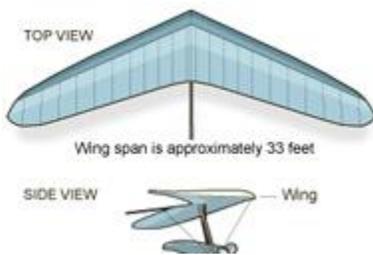
INTRODUCTION: These two hang gliders went from Zapata Tx. To near Lubbock Texas. They set a world record for length of hang gliding..475 miles in 11 hrs. Be sure to look at multimedia by clicking on graphic at lower left.

As they pursued hang gliding history on a July day over Texas, Jonny Durand, foreground, and Dustin Martin were often in sight of each other.

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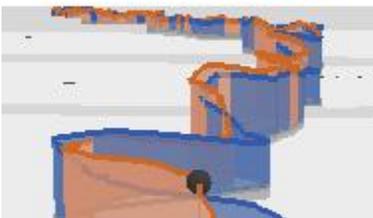
across the Texas sky like a highway. And soaring along those lanes, lofted nearly 8,000 feet by the hot air rising from the earth, two hang gliders raced in tight pursuit of the most prized feat in this high adrenaline niche sport: farthest ever flown.

Multimedia



Interactive Feature

[A Record Hang Gliding Ride on the Texas Wind](#)



Interactive Feature

[Follow Two Hang Gliders on Their Record Ride](#)



Slide Show

INTRODUCTION(CONTINUED): Below is a list of how far from start and time in air.

O Start

30 miles	1.0 hrs
98 miles	2.5 hrs
180 miles	4.5 hrs
280 miles	6.5 hrs
375 miles	8.0 hrs
475 miles	11.0 hrs

QUESTIONS: (a) Find the average velocity between each of these seven mile markers above? e.g. 180 mi. to 280 mi. = 100 mi. $v = x/t$ $v = 100 \text{ mi.}/2 \text{ hrs} = 50 \text{ mi./hr}$
(b) Find the average velocity(average trip velocity) of the six velocities you obtained in (a)? , (c) Now knowing the average trip velocity from (b), total distance traveled in 11 hrs.

HINT: $x = vt$

ANSWERS: (a) 30,45,41,50,63,33.33 miles/hr
(b) ~43.7 mph
(c) ~ 480.9 miles

NOTE: They actually went 475 miles in 11 hrs. The data listed in the introduction came from the print edition of the NYTimes article. JC

The men suspended underneath their aluminum and fabric wings, Jonny Durand and Dustin Martin, had already journeyed 438 miles in 10 hours, splitting up and converging repeatedly as each pursued his own path alongside the red-tailed hawks and turkey vultures. Against all odds, they were now flying nearly wingtip to wingtip. Having launched near the southern tip of Texas in July, a few miles from Mexico, the two men had pushed north, propelled by the fierce flatland wind, and at times had reached more than 80 miles per hour.