



Aquatic Consulting Services

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Boating Tip #15: Speed Made Good

Speed over ground is speed made good, or the vessel's actual speed found by dividing the distance between two fixes by the elapsed time interval between the taking of the two fixes.

Plot your starting point and ending position on a chart and measure the distance between the two points. Calculate the time interval from start to finish by subtracting the starting time from the ending time. Use 60 D Street and solve for speed using the two fixes and the time interval. You don't need to know course or the vessel's speed through the water in order to find speed made good.

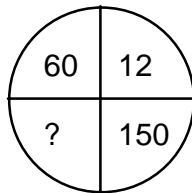
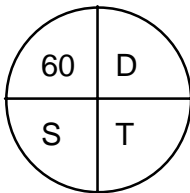
Example: Speed Made Good

At 1350 you are at position 32° 34.8' N, 117° 24.4' W on a compass course of 018° at a speed of 5.2 knots. At 1620, you are at the entrance to the Mission Bay Channel. What was the speed made good?

Distance = 12 nautical miles

$$\begin{array}{r|l}
 15 & \\
 \hline
 \cancel{16} & 20 + 60 = 80 \\
 - 13 & 50 \\
 \hline
 2 & 30
 \end{array}$$

2:30 = (2 x 60) + 30 = 150 minutes



$$\frac{60 \times 72}{735} = 4.8 \text{ knots}$$

Time: 150 minutes

Speed: ?

Distance: 12 miles