

Finding ETAS

To find ETAS, do a wind triangle on a flight computer supporting the calculation. The average E-6B won't have this capability; instead, you'll need one of the "circular" style flight computers, like a CR-3 from Jeppesen.

We'll presume wind from 230 degrees (magnetic) at 50 knots. The course is 310 degrees and the TAS is 150 knots.

In Image 1, we input these values into the computer by rotating the discs until the wind's direction (230 degrees) is aligned with our TAS. Mark that point (the red diamond), then rotate the discs until our true course (310 degrees) is aligned (Image 2). Read the resulting crosswind and headwind on the scales marked "Left Crosswind" and "Headwind." They depict a 10-knot headwind but a 50-knot crosswind.

Fifty knots of crosswind on the outer scale (Image 3) gives a drift correction of 19.5 degrees. Looking at the ETAS scale at the top of the computer reveals the ETAS is 141 knots, which is the value we should use on a CR computer before subtracting 10 knots of headwind, for a groundspeed of 131 knots.

