

## Aircraft Instruments

The angle difference between true and magnetic depicted on charts is called *variation* and the individual lines, called isogonic lines, are labeled either E or W (for east or west). The only exception to the rule is the one line that runs directly through both true and magnetic north. That 0 line of variation is called the *agonic line*. Otherwise you add W to the true heading to get magnetic heading and subtract E from the true heading to get the magnetic one. So if you draw a line between two airports on your sectional chart and find that the true course is 310 degrees, you then look for the magnetic variation in that area. Let's say it's 10E.  $310 - 10 = 300$  degrees. Therefore, you must fly a magnetic course of 300 degrees. But don't forget compass deviation. Now you must consult the compass correction card. Perhaps it says for 300 degrees STEER 305. So you must actually fly a compass course of 305 degrees. All of this is assuming you are flying in the northern hemisphere; turning and acceleration errors are exactly the opposite in the southern hemisphere.