

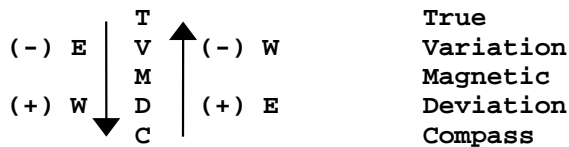
CORRECTING COMPASS ERROR

Or how to tell what direction to point the boat or which way is home.

“Correcting” is converting a magnetic (M) direction to true (T). “Uncorrecting” is converting from true to a magnetic direction. “True” direction is relative to true north (north pole).

Variation is the failure of the compass to point to true north. Variation is read from the compass rose on the chart. Variation is the same for all boats in the same area. Variation is the same for all directions in the same area.

Deviation is the failure of the compass to point to magnetic north. Deviation is caused by local magnetic fields on the boat. These fields may be caused by the engine, instruments or other electronic equipment, power wiring, tools or any other magnetic objects. Deviation is specific to an individual boat. Deviation changes with the boats heading. Deviation is read from the Deviation Table on the boat.



Tele-Vision Makes Dull Children add Wonder.

The heading must be uncorrected to provide a compass reading for the helmsman to steer.

Examples:

True	347	237	160	070	_____	_____	_____	_____
Variation	011E	014W	012W	014W	013W	011W	012E	014W
Magnetic	336	_____	_____	_____	135	196	310	068
Deviation	005E	007E	010W	021W	012E	018E	007E	010W
Compass	331	_____	_____	_____	_____	_____	_____	_____

True	_____	_____	_____	_____	062	191	274	004
Variation	011E	013W	012E	010W	_____	_____	_____	_____
Magnetic	_____	_____	_____	_____	057	179	290	354
Deviation	013E	009E	004W	006E	_____	_____	_____	_____
Compass	025	114	265	358	045	185	276	010

HELP HELP HELP!!!!!!!!!!!!

The skipper just ask me to give them a compass course to steer and when I ask for the “Deviation Table” for the boat they said there were no dirty magazines aboard the boat and furthermore their sex life was none of my business. And besides I can’t remember any of this stuff anyway. Now what the heck do I do??

The compass reading can in this case be taken directly from the chart using the magnetic Compass Rose if several cautions are used. The Deviation for a boat can be large enough that a course can have a significant error. This error can be enough that a course laid from Alki Point to the West Point buoy can be off enough that the boat would run aground east of the West Point Light House and not pass to the west of the buoy. The course can be checked by plotting a reciprocal and using a hand bearing compass to check from where you came from as well as the direction to the desired destination. Use the chart to keep track of the position of the boat on any other land marks. Using other types of position indicators such as GPS or radar

Extreme caution needs to be used if visibility is impaired (such as fog or rain).

Answers

True	347	237	160	070	<u>122</u>	<u>185</u>	<u>322</u>	<u>054</u>
Variation	011E	014W	012W	014W	013W	011W	012E	014W
Magnetic	336	<u>251</u>	<u>172</u>	<u>084</u>	135	196	310	068
Deviation	005E	007E	010W	021W	012E	018E	007E	010W
Compass	331	<u>244</u>	<u>182</u>	<u>105</u>	<u>123</u>	<u>178</u>	<u>303</u>	<u>078</u>

True	<u>049</u>	<u>110</u>	<u>273</u>	<u>354</u>	062	191	274	004
Variation	011E	013W	012E	010W	<u>005E</u>	<u>012E</u>	<u>016W</u>	<u>010E</u>
Magnetic	<u>038</u>	<u>123</u>	<u>261</u>	<u>364</u>	057	179	290	354
Deviation	013E	009E	004W	006E	<u>012E</u>	<u>006W</u>	<u>014E</u>	<u>016W</u>
Compass	025	114	265	358	045	185	276	010