Generally, $\sin H = \sin L \sin d + \cos L \cos d \cos t$

When body is on the meridian,

$$\sin(H+C) = \sin L \sin d + \cos L \cos d \qquad (t=0,\ \cos t = 1)$$

where C is the correction to be added to the ex-meridian altitude.

Subtract: $\sin(H+C) - \sin H = \cos L \cos d \,(1-\cos t)$

$$2\cos\frac{H+C+H}{2}\sin\frac{H+C-H}{2} = \cos L \cos d \; 2\sin^2\frac{t}{2}$$

$$\sin\frac{C}{2} = \sin^2\frac{t}{2}\,\frac{\cos L \cos d}{\cos\frac{2H+C}{2}} = \{C \ll 2H\} = \sin^2\frac{t}{2}\,\frac{\cos L \cos d}{\cos H}$$

As C and t are small quantities, then

$$\frac{C}{2} = \left(\frac{t}{2}\right)^2 \frac{\cos L \cos d}{\cos H}, \text{ where C and t are in radians radians}$$

$$\boxed{C_{rad} = \frac{1}{2}(t_{rad})^2\,\frac{\cos L \cos d}{\cos H}}$$

If you want C expressed in minutes of arc, then

$$C_{rad} = \frac{C_{moa}}{60}\cdot\frac{\pi}{180}$$

and t expressed in either degrees or minutes of time,

$$t_{rad} = \begin{cases} t_{deg}\cdot\dfrac{\pi}{180} \\ \dfrac{t_{mot}}{60}\cdot 15\cdot\dfrac{\pi}{180} \end{cases}$$

Greg's formula: $\dfrac{C_{moa}}{60}\cdot\dfrac{\pi}{180} = \dfrac{1}{2}\left(t_{deg}\,\dfrac{\pi}{180}\right)^2 \dfrac{\cos L \cos d}{\cos H}$

$$C_{moa} = \frac{1}{2}\,\frac{60\,\pi}{180}\,(t_{deg})^2\,\frac{\cos L \cos d}{\cos H} = \underbrace{\frac{\pi}{6}}_{0.5236}(t_{deg})^2\,\frac{\cos L \cos d}{\cos H}$$

Bowditch: On meridian, $H = 90^\circ - (L-d)$, $\cos H = \cos(90^\circ - (L-d)) = \sin(L-d)$

$$\frac{C_{moa}}{60}\cdot\frac{\pi}{180} = \frac{1}{2}\left(\frac{t_{mot}}{60}\cdot 15\cdot\frac{\pi}{180}\right)^2 \frac{\cos L \cos d}{\sin(L-d)}$$

$$C_{moa} = \frac{1}{60}\cdot\underbrace{\frac{15^2}{2}\cdot\frac{\pi}{180}}_{1.9635}\,(t_{mot})^2 \cos L \cos d \csc(L-d)$$