

### STAR TRAILS

Unless you are at the equator or one of the poles, the stars rise from (and set towards) the horizon along paths parallel to the celestial equator. For the following images, use a protractor to determine the latitude of the photograph (measure the straightest star trail on the photo.).<sup>12</sup>



Latitude:  $90 - 35 = 55^\circ$  N *Don't neglect the hemisphere!*



Latitude: \_\_\_\_\_



Latitude: \_\_\_\_\_



Latitude: \_\_\_\_\_



Latitude: \_\_\_\_\_



Latitude: \_\_\_\_\_

## Star Transit Times

Figure 1-3 in the Field Guide is a Graphic Timetable of the heavens giving the transit times of the brightest stars. Use it to find the following<sup>10</sup>

Date	Star	Transit Time
September 1	Deneb	11 pm EDT
April 1	Vega	
May 1	Vega	
June 1	Vega	
July 1	Vega	
August 1	Vega	
September 1	Vega	
May 15		5 am EDT
	Betelgeuse	7 am EDT
February 1		8 pm EST
March 1	Aldebaran	

What pattern do you see in the transit times of Vega through the spring and summer?<sup>3</sup>

Assuming a month is 30 days, how many minutes earlier does Vega transit each day?<sup>3</sup>

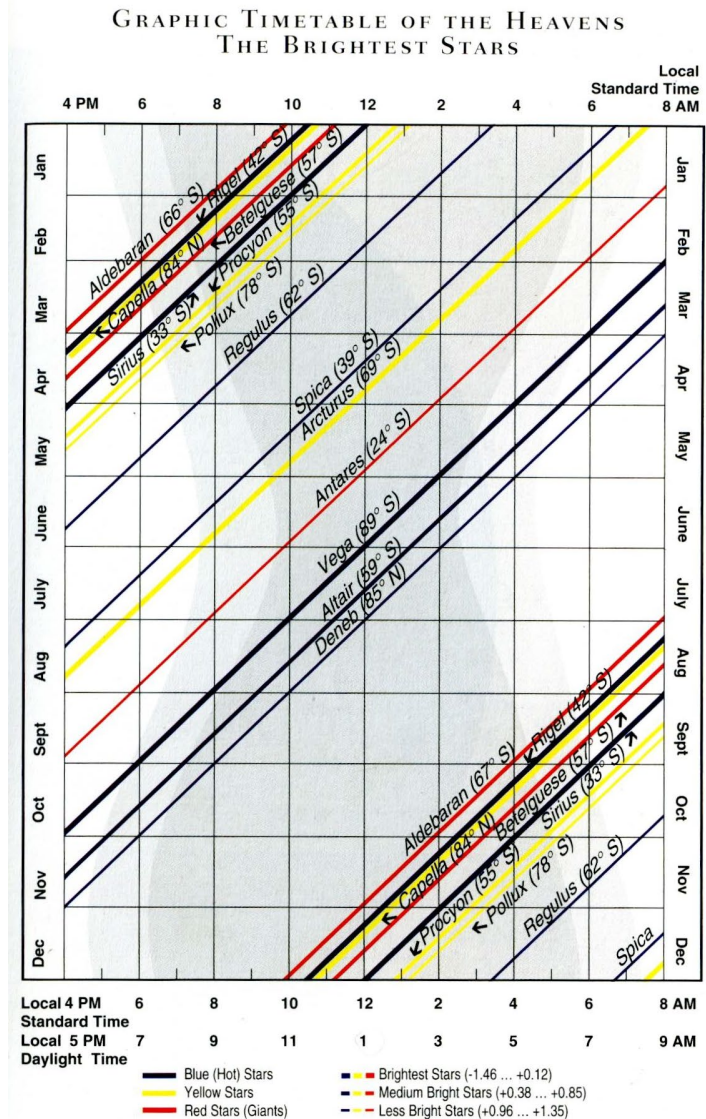


Fig. 1-3 Graphic Timetable of the Brightest Stars, showing when they transit. (© 2000 Scientia, Inc.)