

Observational round. Questions
Clear sky

Code of participant код участника

You are provided with a headlight (with white & red lights).

7. The Moon. Determine (for the time of 1 minute after the beginning of your work at the round) and write down in the right boxes:

7.1. Astronomical azimuth of the Moon (assume the 0° azimuth corresponds to South direction, and the counting is clockwise).

7.2. The height of the Moon above the horizon.

7.3. Constellation(s) in which the Moon is located (write the standard three-letter designation).

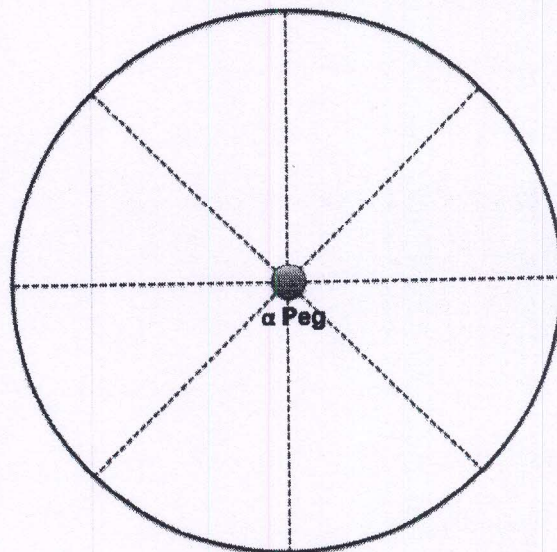
7.4. The angular distance between the Moon and α Cas (Shedir).

9. α Peg (Markab). You are provided with a small telescope (80EQ). (Focal length of the telescope: $F = 900$ mm; focal length of the eyepiece: $f = 20$ mm, and apparent field of view: $aFoV \approx 40^\circ$). Target and center the telescope on a bright star Markab (α Peg), which magnitude is 2.5^m . Then observe for the second bright star, HIP 114031, in the field of view (FoV).

9.1. Right is the FoV of the telescope. Plot the position of HIP 114031 relative to α Peg, and mark the directions by Latin letters N, S, E, W (North, South, East and West respectively).

9.2. Estimate the angular distance between these two stars.

9.3. Estimate the magnitude of HIP114031.



*The maximum total time for all tasks is **15 minutes**.*