

a railroad, these seem to converge in the distance; this happens in August to be in the direction of the stars of Perseus.

To see the Perseids at their best, you need a dark sky, preferably away from the glare of a city. Sometimes the moon interferes. If it happens to be a few days past the full phase, it will be shining brightly in the sky when you want to see the meteors. Its glare will blot out all but the brightest.

But this year the moon is new on Aug. 7, so on the 11th it will still be a crescent, setting in the west well before midnight. So take advantage of this opportunity if you can on the night of the 10th, or even later. It takes several days for the earth to go through the shower.

Celestial Timetable for August

| AUG. | EDT | |
|------|------------|---|
| 1 | 11:00 p.m. | Moon passes Jupiter |
| 4 | noon | Moon passes Venus |
| 5 | 11:00 a.m. | Moon nearest, distance 225,600 miles |
| | 3:00 p.m. | Mercury farthest east of sun |
| 7 | 3:17 p.m. | New moon |
| 9 | 10:00 a.m. | Moon passes Mercury |
| 12 | early a.m. | Perseid meteors visible |
| 14 | 11:20 p.m. | Moon in first quarter |
| 17 | 8:00 a.m. | Moon farthest, distance 251,400 miles |
| 23 | 1:26 a.m. | Full moon |
| | 3:00 a.m. | Moon passes Saturn |
| 24 | 4:00 p.m. | Saturn opposite sun, 815,000,000 miles distant from earth |
| 28 | 7:00 a.m. | Venus passes Mars |
| 29 | 6:00 a.m. | Venus farthest west of sun |
| | 9:00 a.m. | Moon passes Jupiter |
| 30 | 5:16 a.m. | Moon in last quarter |

Subtract one hour for CDT, two hours for MDT, and three hours for PDT.

• Science News Letter, 86:58 July 25, 1964

SPACE

Stars Grounded By Test Cockpit

► SPACE ENGINEERS will soon be watching stars, planets and other space objects fly by their windows, without ever leaving the ground.

A six-foot "star globe" will provide a background of distant stars on the view screens of a simulated cockpit. The globe has five television cameras at its center that look out at hundreds of tiny light sources on the inside of the sphere. A rotating mask will provide an artificial horizon.

A second group of cameras, mounted on rails in a darkened "model room," will project the image of a scale model of whatever planet or space vehicle the "pilot" is approaching in his simulated mission.

An electronic computer will coordinate the system, produced by Douglas Aircraft Company's Missile and Space Systems Division, Santa Monica, Calif., so that the images will move about, or grow or diminish in size, as the "pilot" varies the speed and direction of his spacecraft.

Called OLAFS (Orbiting and Landing Approach Flight Simulator), the system will be ready for use in August. It will first be used by Douglas engineers investigating control systems for a manned orbital research laboratory.

• Science News Letter, 86:59 July 25, 1964

GET READY FOR THE SPACE and SCIENCE ERA! SEE SATELLITES, MOON ROCKETS CLOSE-UP

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|-----------|---------|-----------|------------------|
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