

# Stars of October

CELESTIAL TIME TABLE			
Oct. 1	6:00 a.m. EDT	Mercury farthest east of sun	
	6:38 a.m.	Full Moon	
8	3:46 p.m.	Moon in last quarter	
	10:00 p.m.	Moon passes south of Saturn	
11	11:30 p.m.	Algol (variable star in Perseus) at minimum brightness	
12	noon	Moon nearest, distance 227,030 miles	
14	9:00 a.m.	Mars passes behind sun	
	8:20 p.m.	Algol at minimum brightness	
15	8:25 a.m.	New Moon	
22	9:53 p.m.	Moon at first quarter	
24	7:00 a.m.	Moon farthest, distance 251,320 miles	
25	9:00 a.m.	Mercury passes between sun and earth	
26	9:00 a.m.	Moon passes north of Jupiter	
30	9:19 p.m.	Full Moon	

By James Stokley

During October Jupiter continues to dominate the evening sky. Standing high in the south, surrounded by the much fainter stars of Aquarius, it's the first celestial object you'll see, unless the moon happens to be visible. The largest planet, Jupiter is 88,700 miles in diameter.

Now receding after its closest approach to earth on Sept. 5, Jupiter will be about 390 million miles from us in the middle of October. That's about 20 million miles farther than when it was nearest. It has faded slightly since then, but the difference will not be noticeable.

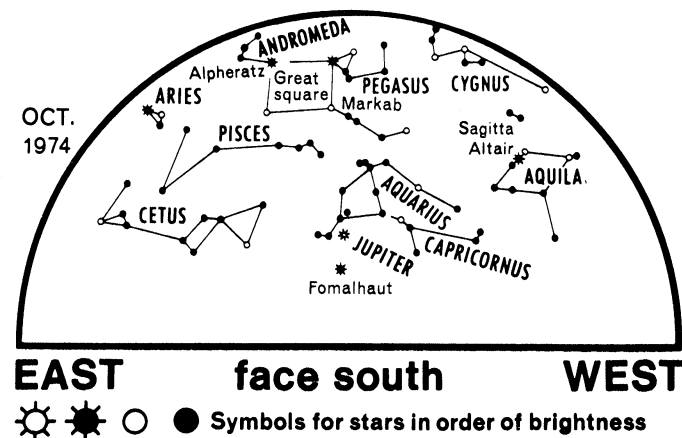
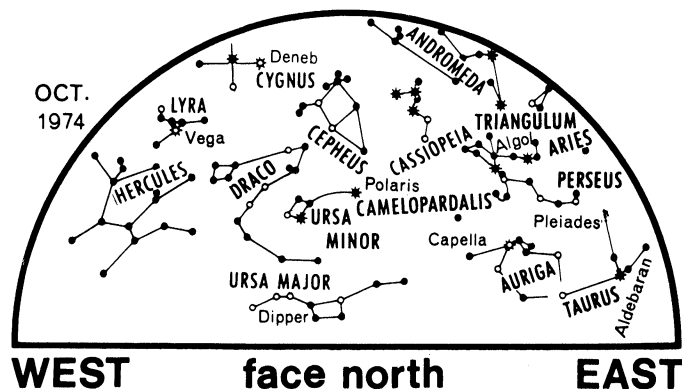
Viewed through a telescope of moderate size (that is, one with a lens two or three inches in diameter and a magnifying power of a hundred or so, which requires a firm support) Jupiter is a most interesting object. It is noticeably elliptical because its rapid (ten-hour) rotation causes a considerable bulge at the equator. One also can see the light and dark bands, parallel to the equator, which cross it, and the four largest of its eleven moons. From night to night these change position as they revolve around the planet, in periods ranging from less than two to more than sixteen days. Sometimes they disappear, when eclipsed behind Jupiter, or as one

passes in front. If it were not for the glare of the brilliant planet these moons would barely be visible to the naked eye on a dark, clear night.

Not only the largest of the planets, Jupiter is also the most powerful radio source among them.

The brightest star of October evenings is Vega, high in the west in Lyra. It's only about an eighth as bright as Jupiter. To the left and somewhat fainter is Altair, in Aquila.

The maps show the sky as it appears about 11:00 p.m., local DST, at the beginning of October and 9:00 p.m. at the end. □



☀ ☿ ☽ ● Symbols for stars in order of brightness

## New Products

**The Smoking Scene** is a grimly graphic anti-smoking educational display, mimicking the advertising techniques of tobacco advertisers to show 15 diseases associated with smoking on mock cigarette packs. With lesson plan, test questions and "mini-texts."

*Spenco Medical Corp.*

Circle No. 157 on Reader Service Card

**Holograms at home** can be viewed with the aid of the Holodapter, an attachment for any conventional slide projector. A lens adapter converts the projector's beam to monochromatic light, while a clip holds the hologram in proper viewing position at the end of an aluminum arm.

*Holax Corp.*

Circle No. 73 on Reader Service Card

**Mini-calculator accessories** for the Hewlett Packard HP-35 include a locking security cradle for wall or desk mount or cable-tether, a battery holder that combines with the available recharger, and a hard leather carrying case.

*Hewlett Packard*

Circle No. 74 on Reader Service Card

**Micro-ultrafiltration brochure** describes a compact, self-contained system for concentration and/or desalting of biological solutions to volumes as low as 0.1 ml. The system is applicable to tasks such as desalting of body fluid samples and density gradient separation, and can be used with a range of ultrafiltration membranes from 500 to 300,000 molecular weight cut-off.

*Amicon Corp.*

Circle No. 75 on Reader Service Card

**Analytical balance** provides built-in automatic preweighing at an economical price. Oversized weighing pan and chamber and

removable (for cleaning) weighing-chamber floor are combined with a protective system that prevents weights from being added to the balance beam once it has been engaged to the supportive knife-edges.

*Brinkmann Instruments Inc.*

Circle No. 158 on Reader Service Card

**The Dead River**, a simulation game for junior high to adult levels, poses an ecological problem in whose solution each of the 10 to 30 players has a specific role to play. It can be used by classes, community groups and other organizations, either as a single exercise or in sequential lessons, involving the actual working through of a regional problem in water pollution.

*Union Printing Co., Inc.*

Circle No. 159 on Reader Service Card

*Products are selected and listed as an editorial service. The claims are the manufacturers'. For further information circle the appropriate number on the postpaid, self-addressed Reader Service Card in the center of this issue.*

September 28, 1974

201