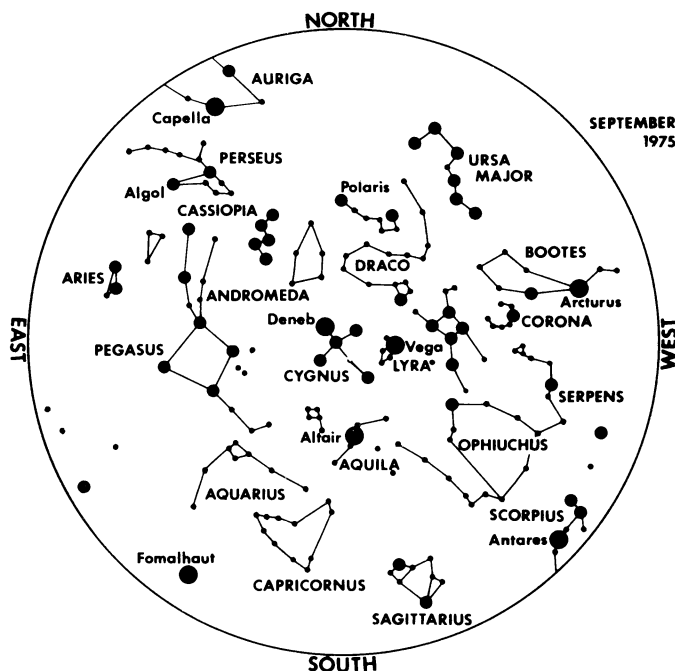


STARS OF SEPTEMBER

CELESTIAL TIME TABLE		
Sept. 2	6:00 p.m. EDT	Moon passes south of Saturn
5	3:19 p.m. midnight	New moon
		Moon nearest, distance 222,000 miles
12	7:59 a.m.	Moon in first quarter
13	6:00 p.m.	Mercury farthest east of sun
20	3:00 a.m.	Moon farthest, distance 252,500 miles
	7:50 a.m.	Full moon
22	3:00 p.m.	Moon passes north of Jupiter
23	11:55 a.m.	Sun over equator, autumn begins in northern hemisphere
27	10:00 a.m.	Moon passes south of Mars
28	7:46 a.m.	Moon in last quarter
30	8:00 a.m.	Moon passes south of Saturn



BY JAMES STOKLEY

Brilliant Jupiter is the prominent planet of the evening sky in September. Standing in the constellation Pisces, it rises in the east about two hours after sunset on the first of the month. On Sept. 30 this time has shortened to a little over half an hour. Of magnitude minus four on the astronomical brightness scale, it far outshines any of the stars around it.

Later in the evening red Mars appears above the eastern horizon. It rises just before midnight on Sept. 1 and about 10:30 p.m. (local DST) on the 30th. In brightness it about equals the most brilliant stars.

On Sept. 13 Mercury is farthest east of the sun. Such a "greatest eastern elongation," as this position is called, makes the planet visible, when it happens in the spring. Now, however, it is so low that it will be difficult to locate in the bright glow of twilight.

Vega, the brightest star in September evening skies, stands high in the west in Lyra. East of this group you'll see Cygnus. Supposedly representing a swan

in flight, it's also called the "Northern Cross," with Deneb at the top of the cross. Although a first-magnitude star, Deneb is less than a third as bright as Vega. Look farther south for Aquila, with Altair, brighter than Deneb but fainter than Vega. These three stars form the Summer Triangle which now, at the end of summer, stands high overhead.

Three other first-magnitude stars also are visible on September evenings but are so low that atmospheric absorption of their light dims them considerably. One is Capella in Auriga, low in the northeast. In coming months it will be more prominent as it rises higher in the evening sky. Another is Arcturus, which is low in the northwest in Bootes. Actually it's slightly brighter than Vega. During spring and summer it was prominent in the southern sky. Fomalhaut, part of Piscis Austrinus, is low in the south.

Above Fomalhaut stands Aquarius, a constellation of the zodiac, which is the sky path of the sun, moon and planets. So also are Capricornus, to its right; Sa-

gittarius, farther right; and Pisces, to the left, where Jupiter is now located. None of these contain any stars of the first magnitude. Above Pisces three stars in Pegasus and one in Andromeda, next group to the north, form the Great Square. This figure, a great help in finding your way among the stars, is prominent on autumn evenings.

In the early morning you can see two more planets. Venus, more than four times as bright as Jupiter, comes up in the east about an hour before the sun on Sept. 6 and still earlier later in the month. It's so brilliant that it remains visible long after all the stars have disappeared with the coming of dawn. Saturn rises some four hours ahead of sunrise. Although of the first magnitude, it's very much fainter than Venus.

Autumn starts in the northern hemisphere on Sept. 23 at 11:55 a.m., EDT. At that time the sun will stand directly over the equator, at a point in the jungles of northern Brazil about 700 miles west of Belem. □

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