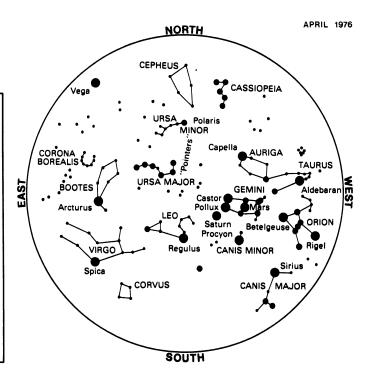
## **CELESTIAL TIME TABLE** April 9:00 am EST Moon passes north of Jupiter 1:00 pm Mercury behind sun 6 10:00 pm Moon passes south of Mars 2:02 pm Moon in first quarter 8 7:00 am Moon passes south of Saturn 12 1:00 pm Mercury passes north of Jupiter 14 2:00 am Moon nearest, distance 221,800 miles Full Moon 6:49 am 21 2:14 am Moon in last quarter 8:00 am EDT 27 Moon farthest, distance 252,500 miles 4:00 pm Jupiter passes behind sun 10:00 pm Mercury farthest east of sun 29 6:20 am New Moon, eclipse of sun visible in Europe, Africa and Asia 30 midnight Moon passes south of Mercury



## BY JAMES STOKLEY

Perhaps, like many people, you have never seen the planet Mercury. You'll have a good chance to do so in the last part of April. This elusive body, only 36 million miles from the sun (earth's distance is 93 million miles) swings back and forth from one side of the sun to the other. When to the west, it rises ahead of the sun and may be visible low in the east at dawn.

On April 27 it will be farthest east of the sun and will remain visible in the west as twilight gathers. On that date, at 40° north latitude, it will set nearly two hours after the sun. From about April 20 to the end of the month when you have a clear sky in that direction, look low in the west at dusk and you will see Mercury.

This planet is 3,025 miles in diameter, compared with 7,927 miles for earth, and it rotates on its axis once in 58 days, 16 hours. As it revolves around the sun once every 88 days, it turns around its axis 3 times in every 2 trips around the sun. Until a few years ago, astronomers thought that the periods of rotation and revolution were the same.

At the beginning of April, Jupiter may also be visible low in the west. Then it will disappear, before it passes behind the sun on the 27th. On April 12, Mercury, about four times as bright as it will be at the end of April, will pass Jupiter, to the north. On the 30th at midnight the moon will pass to the south of Mercury.

Two other planets will be visible later

on April evenings. One is Mars, in the west in the constellation Gemini. It's receding from earth and becoming dimmer, although it still equals a star of the first magnitude. Above, are the two principal stars of this group: Pollux, the brighter, to the left, and Castor. Extend a line through them to the south and you come to the second planet. This is Saturn, now standing in Cancer. It's brighter than Pollux or Mars.

An annular eclipse of the sun will occur on April 29, along a band crossing northwest Africa from Dakar to Tripoli, Turkey, and the southern U.S.S.R. to Sinkiang. In New England and eastern Canada it will be visible as a partial eclipse for about 40 minutes, just after sunrise.

## **ARENA**

It's unanimous. The critics and the ratings agree that this has been the worst television season ever. And with reruns beginning, it is not likely to get any better. There have, however, been a few bright spots and among them is NOVA, the Public Broadcasting System's weekly science series, which has not yet begun reruns. Check local listings for the exact time and day. The upcoming shows are:

- April 11—"The Transplant Experience" tells heart transplant specialist Norman Shumway's story and follows the complete routine of a heart transplant.
- April 18—"The Underground Movement" takes a look at animal life underground—from large animals, like foxes and badgers, to moles, worms and a myriad of microorganisms.



A changed life for Netsilik seal hunters.

- April 25—"The Secrets of Sleep" challenges some traditional ideas of how much sleep humans need and suggests that worry about insomnia may be worse than insomnia itself.
- May 2—"Hunters of the Seal" takes anthropologist Asen Balikci back to Pelly Bay to see what has happened to the Netsilik Eskimos since their resettlement by the Canadian government in a permanent encampment. Balikci made a landmark series of films about these formerly nomadic people as they were 10 years ago.
- May 9—"Benjamin," a normal, healthy baby, is the subject of a revealing look at early child development.
- May 16—"The Other Way" is British economist E. F. Schumacher's alternative for the Third World nations. His ideas have stirred such interest that developed nations are now beginning to pay attention.

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