

Carnegie Institution in Washington picked up a far more powerful radio transmission from this planet. Its wavelength is about 50 feet and in many ways it resembles the radio static produced by lightning flashes.

Could it be that there are huge electrical storms on Jupiter, which produce static so powerful that its effect is felt on earth, an average of some half a billion miles away? This is one theory, but the radio bursts from Jupiter seem to have about a hundred trillion times the power of the average terrestrial lightning stroke, and they last as much as a second, while our strokes are but a few thousandths of a second long.

The planet Jupiter is very different from earth. It is about 87,000 miles in diameter. At the center, it seems, there is a rocky core. Around this there is a layer of ice, and over that an atmosphere of hydrogen, methane and ammonia several thousand miles thick.

The pressure is so great that this "atmosphere" is, on the average, about a third as dense as water. In it there must be great clouds of electrically charged gases, and as these interact with each other they produce the radio waves which signal to us their presence.

Celestial Timetable for June

JUNE EST

2	11:02 a.m.	Moon in first quarter
9	8:02 a.m.	Full moon
	9:00 p.m.	Moon nearest, distance 222,100 miles
10	2:00 a.m.	Moon passes north of Jupiter
11	5:00 a.m.	Moon passes north of Saturn
15	11:36 p.m.	Moon in last quarter
18	2:00 p.m.	Moon passes south of Mars
19	9:00 a.m.	Mercury farthest east of sun, visible for a few days around this time in west just after sunset
	9:00 p.m.	Jupiter in opposite direction from sun and nearest earth; distance 393,800,000 miles
21	4:43 a.m.	Sun farthest north, summer commences in Northern Hemisphere (winter begins in Southern Hemisphere)
22	11:00 a.m.	Venus behind sun
23	10:27 p.m.	New moon
24	5:00 a.m.	Moon farthest, distance 252,700 miles
26	4:00 a.m.	Moon passes south of Mercury

Subtract one hour for CST, two hours for MST, and three for PST.

Science News Letter, May 28, 1960

AERONAUTICS

New Solar Cells Made: No Batteries Needed

A SOLAR CELL that serves as its own storage battery was reported to engineers attending a Society of Automotive Engineers aeronautic meeting in New York.

If it fulfills its apparent promise, the cell will make obsolete solar cells now powering American satellites. These older cells require heavy storage batteries to store the electricity converted from sunlight.

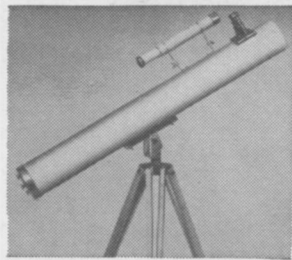
The new cells convert solar energy directly to chemical energy. The cells themselves store the chemical energy for later conversion to electrical energy. Bert H. Clampitt and Dale E. German of the Wichita, Kans., division of the Boeing Airplane Company built the experimental cells.

Science News Letter, May 28, 1960

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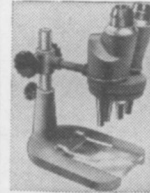
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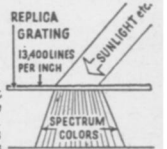
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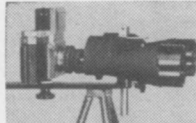
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