DCS switches off the scientific telemetry and then sends spacecraft engineering data for 16.8 seconds. This cycle continues during the flight through interplanetary space.

But beginning at ten hours before it passes Venus, the spacecraft will devote its telemetry system to full-time transmission of scientific data from the six experiments.

Thus is astronomy approaching the most important advance of its history. Up to now it has been purely an observational science. From great distances astronomers have picked up light, radio waves and other radiations from celestial bodies. They have analyzed these messages and learned much about the stars, planets and galaxies. Now they are reaching out to observe at close range. Soon astronauts will reach the moon and later the planets—perhaps walk around on some. The era of astronomical exploration will then be here.

Celestial Time Table for December

DEC.	EST	
1	10:00 p.m.	Moon passes Saturn
3	10:00 p.m.	Moon passes Jupiter
4	11:48 a.m.	Moon in first quarter
7	3:31 a.m.	Algol (variable star in Perseus) at minimum brightness
8	noon	Moon nearest, distance 226,800 miles
10	12:20 a.m.	Algol at minimum
11	4:28 a.m.	Full moon
12	9:09 p.m.	Algol at minimum
15	5:58 a.m.	Algol at minimum
16	2:00 a.m.	Moon passes Mars
18	5:43 p.m.	Moon in last quarter
20	6:00 a.m.	Moon farthest, distance 251,500 miles
22	3:15 a.m.	Winter commences in Northern Hemisphere
23	2:00 a.m.	Moon passes Venus
26	5:59 p.m.	New moon
29	9:00 a.m.	Moon passes Saturn
30	2:04 a.m.	Algol at minimum
31	10:00 a.m.	Moon passes Jupiter

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

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SOCIOLOGY

Intellectual Activity on Social Systems Needed

➤ THE GREATEST threats of American disaster are rising in social systems and not the physical and biological developments into which we are putting our major intellectual energy, Dr. Kenneth E. Boulding, professor of economics, University of Michigan, declared to the American Philosophical Society meeting in Philadelphia.

Mankind's intellectual resources are scarce and their proper allocation among different lines of endeavor, Dr. Boulding said, is a serious problem which we have no good machinery to solve. The surplus of intellectual activity that is available over and above what is necessary to maintain the existing stock of knowledge needs to be used in the most effective way, he maintained. His contention is that not enough of it is going into finding out the best utilization in the fields of water resources, transportation, agricultural policy, urban policy, social security and national defense.

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