

In southern Russia, at Rostov-on-Don and Stalingrad, the eclipse occurs around the middle of the day. The sun will then be about 27 degrees above the horizon and it will be hidden for two minutes 45 seconds. Farther west, in France and Italy, the sun will be lower, and the total eclipse will last about two minutes.

The path crosses the Riviera and persons wintering there will have an unusual spectacle to watch on the morning of the 15th. Watching the sun, with adequate protection for the eyes, they will see the dark disc of the moon slowly creep across the sun's face.

Then will come totality, the corona will flash into view, and the brighter stars, and Venus, will be visible. Then a sliver of the sun's disc will again appear, slowly widening as the moon moves away, and the eclipse ends. Over all of Europe, northern Africa and much of Asia, there will be a partial eclipse, with the moon hiding only part of the sun. The nearer a person is to the path of totality, the greater will be the area of the sun that is covered.

Fortunately for the astronomers, there are many observatories along the path. Near Ancona, Italy, is the Arcetri Observatory, equipped with special instruments for solar observations. At St. Michel, in southern France, is the Haute Provence Observatory, with a 76-inch reflector that is the largest telescope in Europe.

There is another large observatory on Mt. Gros, near Nice. Russian astronomers will be able to watch the eclipse from their large observatory at Simeis in the Crimea. With at least a dozen observatories along the path, this should be one of the best observed of all eclipses. If the weather is good, these observations should lead to many important new scientific data.

### Celestial Time Table for February

Feb.	EST.	
4	3:42 a.m.	Algol (variable star in Perseus) at minimum brightness
6	7:00 a.m.	Mercury farthest east of sun, visible low in west after sunset for a few days about this date
7	12:31 a.m.	Algol at minimum
8	11:50 p.m.	Moon in last quarter
9	9:20 p.m.	Algol at minimum
12	12 noon	Uranus nearest earth, distance 1,614,000,000 miles
13	1:00 a.m.	Moon passes Jupiter (visible low in east before sunrise)
	2:00 a.m.	Moon passes Saturn
14	6:00 a.m.	Moon nearest, distance 222,600 miles
15	3:11 a.m.	New moon; eclipse of sun visible in Europe, Africa and Asia
18	10:00 a.m.	Jupiter passes Saturn
21	7:00 p.m.	Mercury passes between earth and sun
22	3:35 a.m.	Moon in first quarter
24	12 noon	Moon passes Mars
25	12 noon	Pluto nearest earth; distance 3,028,000,000 miles
26	4:00 p.m.	Moon farthest; distance 252,200 miles
27	2:16 a.m.	Algol at minimum

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

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### SOCIOLOGY

## Specialists Lead Society

► THE TRAINED "SPECIALIST" has replaced the local "aristocrat" in community leadership, a study of the Syracuse metropolitan area by Syracuse University sociologists has shown.

They found that technically trained persons are natural candidates for community leadership roles, because of the complexity of today's problems.

Community leadership patterns have been forced to keep pace with the physical growth and expansion of cities. In Syracuse, once ruled by a single clique, the sociologists found that the diverse problems of the community were handled by many persons, technically trained in specific fields.

Highlights of study's results:

1. The old "aristocracy" is no longer dominant. Although the "aristocrat" still exerts some influence and is active in the community, he no longer is automatically a leader.

2. The trained professional has become a force in the community. Technically trained persons become involved according to their interests and abilities. Engineers handle problems of city planning, finance men tackle the city budget, and public

relations men administer the Community Chest.

3. The community leader of today is often nonlocal. Specialists tend to change locations with job promotions or changes. Because of their specific knowledge, the specialists tend to be community decision-makers, despite the previous assumption that leaders are always "local."

4. A very small segment of the population is involved in leadership. In the Onondaga County area of 395,000 people, less than three-tenths of one percent of the citizens participated in a direct way in the making of community decisions.

Although leaders share similar social characteristics, such as social position and education, a potential leader need not have this background. If a man has the necessary administrative or technical skills, he has access to leadership positions.

By use of the factor analytic technique, the team of sociologists studied patterns of participation in decision-making on 39 selected community problems. The participants, all community leaders, were then contrasted with a random sampling of the population.

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### PSYCHIATRY

## Parents Foster Violence

► CHILDREN AND ADOLESCENTS who commit murder or make murderous attempts do so through parental fostering.

Consciously or unconsciously, one or both parents of eight boys studied for a year by Drs. William M. Easson and Richard M. Steinhilber, Mayo Clinic, Rochester, Minn., fostered and condoned murderous assault.

The patients were all from socially acceptable "normal" families but all eight acted violently with parental permission and approval, conscious or not, the psychiatrists say.

One of the eight shot and killed his music teacher, a middle-aged spinster friend of his mother. The ten-year-old boy, son of a lawyer, had collected and gloried in guns, and even after murder had been committed he was allowed to keep his gun collection.

The age of the boys ranged from eight to 16. Most of them had collections of knives and guns that they were allowed to retain and in some cases to increase even after several violent and menacing acts.

The psychiatrists say that no murder is without motive. In each case the child was repeatedly given to realize that his parents expected him to be physically violent and antisocially aggressive, even to the point of murder.

They say the boys were identified with their mothers in a hostile fashion and that the fathers either rejected them brutally or failed to play a definite masculine role in the family.

In one case, the father's murderous out-

bursts toward his boy were barely controlled, and in the child's own violent aggression, the psychiatrists pointed out, he was identifying with his father. Both parents condoned his behavior.

The study is reported in the American Medical Association's Archives of General Psychiatry, 4:1, 1961.

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### GENERAL SCIENCE

## Ford Foundation Grants Total \$1.3 Billion

► THE FORD FOUNDATION made grants totaling more than \$1.3 billion during its first ten years as a national organization.

During 1960, the Foundation granted more than \$160,000,000 to educational institutions, research organizations and hospitals. The 1960 total was the highest since 1956 when the Foundation made the bulk of its capital grants for faculty salaries, hospitals and medical schools.

Nearly half of the money spent over the ten-year period went to formal educational programs. Other major categories included arts and sciences, and hospital and medical schools.

Educational institutions again received a major portion of the grants in 1960.

The statistics were published in the 1960 Annual Report.

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