

The light curve of a pair of stars tells whether the eclipse is edge-on or off-center. From it we know also that some stars have sharp outlines while others have atmospheres that circulate around the pair.

"A PRIMER FOR STAR GAZERS," by Henry M. Neely, was reviewed by Mr. Robinson who recommended the book for beginners and others learning constellations.

OCCULTATION PREDICTIONS

Morgan Cilley

Date	Star	Mag	Edge	Immer.	Emer.	H.A.	Limit
Jan.							
29	31 Ari	5.7	D	9:01 P	10:11 P	3 W	3 $\frac{1}{2}$
30	26B Tau	6.4	D	11:01 P	Set	6 $\frac{1}{2}$ W	3 $\frac{1}{2}$
31	224B "	6.1	D	4:40 P	5:49 P	3 E	3 $\frac{1}{2}$
31	227B "	5.9	D	5:70 P	6:30 P	2 $\frac{1}{2}$ E	
Feb.							
1	121 Tau	5.9	D	10:46 P	11:05 P	2 W	4
2	Eps. Gem	3.2	D	11:42 P	0:45 A	2 E	4
3	Kap. Gem	3.7	D	8:24 P	9:27 P	2 $\frac{1}{2}$ E	4
7	Nu Vir	4.2	B	11:26 P	0:40 A	3 E	2 $\frac{1}{2}$
9	65 Vir	5.9	B	11:15 P	0:18 A	0	
10	66 Vir	5.8	B	0:02 A	1:11 A	1 W	
10	72 Vir	6.1	B	5:00 A	6:00 A	1 W	
10	1 Vir	4.8	B	5:42 A	6:19 A	1 $\frac{1}{2}$ W	
12	Nu Lib	5.3	B	5:23 A	6:37 A	1 $\frac{1}{2}$ E	
13	Lam Lib	5.1	B	4:11 A	5:33 A	2 $\frac{1}{4}$ E	

Time is E.S.T. The first three columns give the date, star designation, and magnitude. The next indicates the event takes place on the "D" dark or "B" bright edge. "Immer." and "Emer." show the times, P.M. and A.M., of disappearance and reappearance. H.A. is the approximate hour angle of the moon at immersion. The last column gives the hour angle limit of vision of the 5-inch, i.e., the limit beyond which the moon will be hidden from the telescope. In most of these cases, however, the reflector can be taken out to a better position.

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STAR DUST

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COMING EVENTS

- Feb. 1 Saturday, 8 p.m. Commerce Auditorium. "Looking Through the Milky Way," Rev. Francis J. Heyden, S.J., Georgetown Observatory.
- Feb. 6 Telescope class Thursday, 7:30 p.m. room 211, McKinley High School, 2nd and T Sts. N.E. R. M. McLellan conducting.
- Feb. 15 Discussion group, 8:00 p.m. foyer of Commerce Auditorium. "Comets and Meteors," with Richard St. John and P. A. Simpson leading.
- Feb. 20 Telescope making, 7:30 at McKinely High School.

"LOOKING THROUGH THE MILKY WAY," the results of his two years' work in conjunction with Harvard and Yerkes Observatories, will be the subject of Rev. Heyden's illustrated lecture February 1st. The study was made to determine how much interstellar dust there is in the Milky Way. Reverend Heyden is in charge of the Georgetown Observatory and instructor of postgraduate astronomy.

TEN TELESCOPE MAKERS with ambitions from 6- to 12-inch reflectors reported for instruction January 9 and 16. Alternate Thursdays beginning January 23 were set as class nights. However, Mr. McLellan will be at the machine shop nearly every Thursday so that those who wish may double their shop time. Motion pictures of the Philadelphia ATMs were shown and the class visited Mr. Evans to see the work on his 24-inch. ATMs will

find "Amateur Telescope Making" and "Amateur Telescope Making Advanced" two very helpful volumes. "Telescoptics" at the end of Scientific American, and "Gleanings for A.T.M.s" in Sky and Telescope also will be of interest.

PROPOSAL TO CHARTER PLANE FOR ECLIPSE
IN BRAZIL

Lawrence Peterson of Milwaukee proposes to form a group interested in chartering a plane to observe the solar eclipse in Brazil next May. Plans call for flying a DC-4 plane of the Braniff Airways, in the path of totality (the eclipse is total for about four minutes) at altitudes as great as 30,000 feet, if necessary, to overcome bad weather.

"It is expected that the total cost of the trip will be shared equally by all members of the party. The exact cost cannot be established until we are more definite in our proposition with the airline, and it is for this reason that I ask you for a fairly immediate reply indicating your interest in this proposition. Conservatively estimated, it is believed that the maximum cost per person for transportation, including taxis, etc., food, lodging, and incidentals except souvenirs, should not be over \$1000. This provides a two-weeks' trip by air to most of South America and a four-minute total eclipse to be observed in the modern and only sure way--from a plane which can fly at high altitudes (oxygen for the passengers)."

Although the capacity of the plane is 44 persons, the party will be limited to about 30, the remaining space being reserved for cameras and other scientific equipment. If you contemplate making a reservation, please notify the editor so that word may be sent to Mr. Peterson.

6-INCH NEWTONIAN REFLECTOR FOR SALE by Mrs. Wm. E. Watson, "Vale," Route 2, Vienna, Va. Valued at \$475.

NEW MEMBERS

Nathan Apple, 1222 Quincy Street N.W. (11) Taylor 9190
Franklin May, 201 Baltimore Ave., Takoma Park, Md. (12)
Sligo 1837
Lt. Comdr. Marie Frauens, 800 18th St. N.W. (6)
National 9216
Richard St. John, 6811 9th St. N.W. (11) Randolph 4560
Philip Anthony Simpson, 1316 Gallatin St. N.W. (11)
Randolph 8972
Viola Sperka, 3007 S. Buchanan Street, Arlington, Va.
Business: Republic 7400, Ext. 3603.
Junior members
Ernest Gehrels, 3422 Reservoir Road (7) North 9594
Simon Maurice, 1432 Oak St. N.W. (10)

GRACE SCHOLZ NOMINEE FOR TEMPORARY COUNCILLOR. Upon recommendation of the trustees, Miss Scholz was elected representative of NCA, on the preliminary ballot of the Amateur Astronomers League. When all member societies have submitted nominations, a ballot will be sent out for selection of twelve councillors.

THREE JUNIOR ASTRONOMERS led the discussion group in January and were well prepared on the topic of superior planets. These informal sessions have had an attendance of 15 or more each month. Mr. St. John and Mr. Simpson, who have recently become members, were "voluntarily drafted" for next month's discussion of comets and meteors.

LIGHT CURVES became character sketches of eclipsing binary systems, as Dr. B. W. Sitterly explained their vagaries at the last lecture. Although no one has ever seen two stars eclipse each other, by watching their combined light man can learn more about the real nature of a pair of stars than in any other way. Scientists study the light to determine what it does and what it consists of, how it changes in amount. They examine the amount with a photometer and determine its component parts by means of a spectroscope.