NORTHERN LIGHTS

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NORTH CENTRAL REGION

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ROAMING THE REGION

A special welcome to the Sheboygan Astronomical Society, the newest League member in our region. The group has 20 adult and 5 junior members. The society correspondent is: Jeffrey Anderson, 635 School St., Kohler, Wis. 53044.

Rollin VanZandt (Peoria A.S.) recently retired from work at Caterpillar. Van was presented with two unusual gifts: the word REWARD (Retired Eclipse Watching Assistant Research Director) and a special "Star and Eclipse Watching Chair."

Homer DaBoll (Argonne, Fox Valley A.C.) will soon begin publication of a newsletter devoted exclusively to grazing occultations. Although it will be available only on a subscription basis, the first issue will be sent to all persons now receiving graze information from David Dunham. Other persons interested in subscribing should contact Mr. DaBoll at the address listed on the enclosed regional graze map.

Group photographs from the Chicago Convention are still available. Anyone wishing a group photo should send $1.00 to Walter Piorkowski, 3000 W. 54th Pl., Chicago, Ill. 60657. Everyone who paid for a sky show before the admission fee was cancelled will automatically receive a picture. All requests for photos must be made by August 18, 1974.

REGIONAL MEETING

The 28th annual meeting was called to order at 3:05 by chairman James H. Fox.

The roll call of societies was taken with 16 societies present.

The minutes of the 1973 business meeting were read and approved.

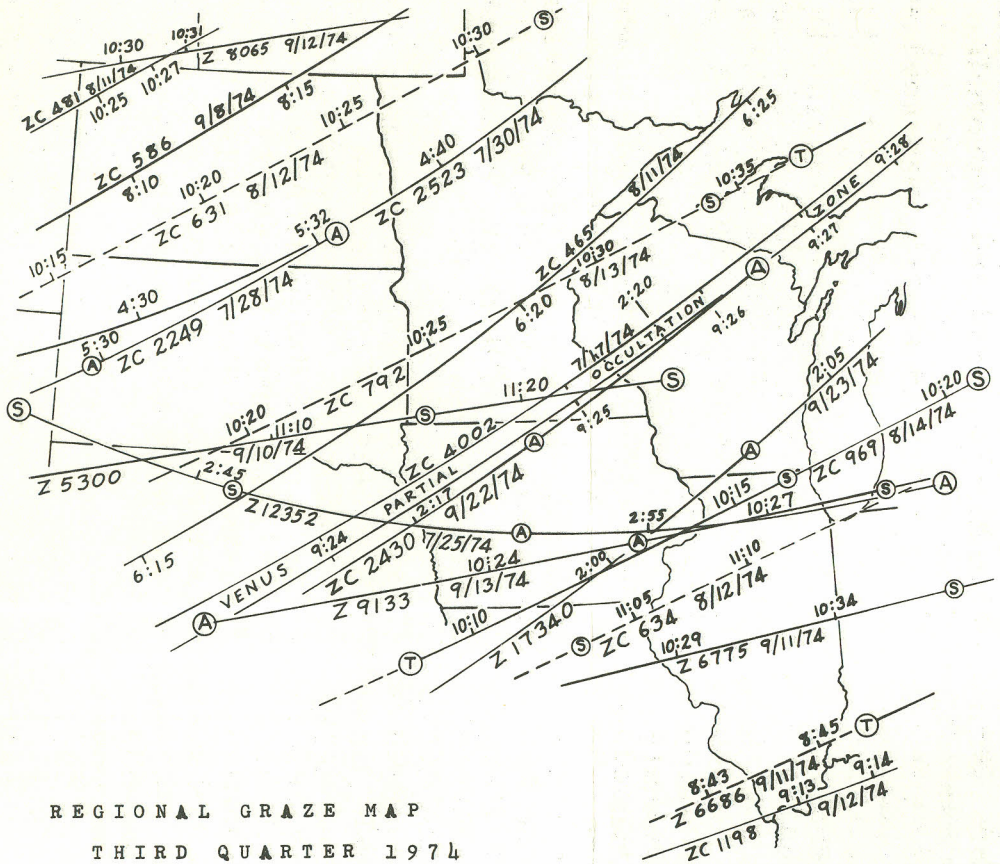
The treasurers report was read and accepted.

Orville Brettman made a motion that we do not ask for this year's dues rebate from the Astronomical League. It was seconded by Ed Halbach and approved.

Hubert Brueckner made a motion that we do not mail the June issue of Northern Lights to each member as had been done the last two years. It was seconded by Father Robert and approved.

Rockford Amateur Astronomers have sent an invitation to hold the 1975 North Central Convention in their city. Charles J. Thompson made a motion we accept the invitation. It was seconded by Roger Kolman and passed.

(cont. p. 4)



REGIONAL GRAZE MAP

THIRD QUARTER 1974

Map scale precludes its use to set up expeditions. If interested, contact H. F. DaBoll, 6N106 White Oak Lane, St. Charles, Illinois 60174, (phone 312/584-1162) for detailed predictions or information on an expedition already in your area. Include star number, date, and approximate longitude of proposed observation. Also mention whether you have had previous experience in planning graze expeditions.

If an encircled A or S (Moon or Sun altitude, respectively) is shown within a limit, increasingly larger telescopes are needed from there to the same symbol ending the limit, while "IMBSW" (it might be seen with) refers to the better part, on the other side of the intra-limit symbol. Time ticks on the south side of a limit indicate northern limit grazes, and vice versa. A dashed limit indicates central graze at the bright limb; an encircled T means just at the cusp.

1974 DATE	STAR NUMBER	MAG	MOON	MOON ALT	SUN ALT	CUSP ANGLE	IMBSW	NOTES
7/17	ZC 4002	-3.2	6%-	5,12	-15,-8	-1.1N,-1.2N	Unaided	A,1,2
7/25	Z 12352	8.1	39%+	17,10	-9,-16	3S,5S	5"	3
7/28	ZC 2249	6.9	70%+	10,5	-23,-23	9S,9S	6"	4
7/30	ZC 2523	4.9	86%+	21,15	-18,-19	7S,9S	3"	B,4,5
8/11	ZC 465	4.5	48%-	12,18	-31,-28	1.4N,1.8N	2"	C,6
8/11	ZC 481	8.3	46%-	49,49	-12,-10	3N,3N	6"	
8/12	ZC 631	5.6	36%-	40,47	-15,-6	-2.6S,-1.6S	2"	D
8/12	ZC 634	5.3	35%-	59,62	-2,-3	-2.1S,-1.2S	2"	E,3
8/13	ZC 792	5.1	25%-	34,43	-15,-5	-1.5S,-0.4S	2"	F,6
8/14	ZC 969	7.1	16%-	26,32	-14,-8	0.2S,0.8S	3"	3,7
9/8	ZC 586	7.0	62%-	40,44	-35,-31	3N,2N	5"	8
9/10	Z 5300	8.2	39%-	54,62	-13,-3	1.8S,4S	6"	
9/11	Z 6686	7.3	29%-	26,27	-32,-31	-0.3S,-0.1S	3"	10
9/11	Z 6775	8.2	28%-	44,47	-14,-11	2S,3S	6"	9
9/12	ZC 1198	6.2	19%-	18,19	-28,-28	1.8S,1.9S	2"	G,10
9/12	Z 8065	8.3	18%-	22,22	-19,-18	3S,3S	6"	8
9/13	Z 9133	8.5	10%-	14,20	-19,-12	6S,7S	6"	3
9/22	ZC 2430	7.0	38%+	12,5	-21,-25	12S,12S	3"	11
9/23	Z 17340	8.3	48%+	20,15	-21,-25	12S,13S	6"	12

Universal times and dates are used. Moon altitude, Sun altitude, and cusp angle, in degrees, are given for the western and eastern intersection of each limit with the boundary of the North Central Region, and for the end of any limit which falls within the Region. Cusp angle is the separation of central graze from the northern or southern cusp, with negative values indicating central graze on the bright limb. Under MOON, + means waxing, - means waning.

NOTES:

A. Venus
B. 51 Ophiuchi
C. Botein (Delta Arietis)
D. 51 Tauri
E. 56 Tauri
F. 109 Tauri
G. 2 B Cancri

1. Cusp angle is based on 180° sunlit limb, but crescent of 6%-sunlit Moon is several degrees shorter than that, so central graze actually will be at the dark limb.
2. Major (Fox) expedition planned near Osseo, Wisconsin. Weather alternate (DaBoll) expedition planned near Munising, Michigan. Possible alternate (Kloeppel and/or Kriegler) expedition near Sioux City, Iowa.
3. Northeastern Illinois expedition.
4. Possible Rapid City expedition.
5. Possible Willcox (Fargo) expedition.
6. Possible Fox (Twin Cities) expedition.
7. Possible Olsen (Cedar Rapids) expedition.
8. Possible Shinn (Winnipeg) expedition.
9. Possible Sandy (Kansas City) expedition.
10. Possible Warren (Bloomington, Indiana) expedition.
11. Possible Kriegler (Omaha) expedition.
12. Possible Halbach (Milwaukee) expedition.

CONVENTION HIGHLIGHTS

PAPER SESSIONS

Joseph Kis (Racine) further discussed his spatial model of over 80 nearby stars. This year he set forth the concept of helical galactic pores as a mechanism for mass transfer and circulation throughout the galaxy.

Homer DaBoll (Argonne, Fox Valley) presented another chapter in his "Have telescope - will travel" series on grazing occultations. After giving a brief run-down on successful expeditions during the past year, Homer discussed some of the more promising grazes this summer.

Roger Kolman (Chicago) described a peculiar class of variable star, such as R Aquarii, called symbiotic novae. These odd stars go through periodic nova-like explosions which vary not only the star's brightness but also its spectral emissions.

Wynn Wacker (Madison) detailed some history of the Madison society's observatory and then told of some of the research being carried on there. Major emphasis has been placed on planetary programs.

Mark Anderson (Chicago) briefly described the architectural evolution of the Adler Planetarium.

Rollin VanZandt (Peoria) outlined the many services available to an amateur society from the Astronomical League.

Bruce Soyer and Dan Joyce (Chicago) gave separate papers on the dark pollution problem in the Chicago area. Their conclusions were that travel to remote sites is necessary for deep sky observing.

James Fox (3M Club, Twin Cities) described plans for a major expedition near Osseo, Wisconsin, to observe the July 17th partial occultation of Venus.

Paul Lorenz (Chicago) discussed his observations of non-Messier, deep sky objects. There are many objects which Messier missed that are within reach of amateur instruments.

Edward Halbach (Milwaukee) described a method for graduating setting circles to any desired accuracy without special machinery. He also warned of the common pitfalls of making circles too small and graduations too close.

A group from Elgin gave a delightful multi-media presentation of their experiences aboard Canberra during the 1973 solar eclipse cruise. The slide-movie-tape show was excellently done and truly captured the flavor of the many activities on their "Incredible Cruise."

SKY SHOW

The Adler Planetarium presented an excellent program on planetary exploration. The "Sky Show" included the use of both the new Kroc Universe Theater and the completely refurbished Zeiss optical planetarium. The program included early earth-based astronomers and continued through modern spacecraft observing techniques. A special added attraction at the end of the program demonstrated many of the versatile accessory projectors available for use with the Zeiss instrument.

MEETING

James Fox stated the dues for the Astronomical League, which are 25¢ per member at the present time, would be increased. It was decided this was not the time to determine what would be an acceptible increase and this information would be brought up at local society meetings and discussed there. The societies will forward the information on the dues increase to James H. Fox before the National Convention.

Charles J. Thompson, chairman of the nomination committee, presented a slate of officers for 1975:
James H. Fox, Chairman
William M. DuVall, Vice Chairman
Ronald E. Jones, Secretary-Treasurer
There were no nominations from the floor and a unanimous ballot was cast for Chairman & Vice Chairman. Ronald E. Jones was elected Secretary-Treasurer.

Rollin P. VanZandt has two years remaining as regional representative.

Homer DaBoll was made nominating committee chairman for 1975.

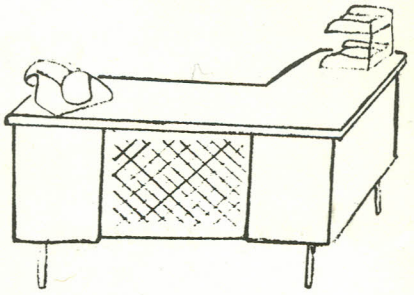
A motion was made to reword Article IV, Section II, of the regional constitution to say: "The registration fee at regional conventions would be established by the host society and the regional officers." It was seconded by Homer DaBoll and passed by over 2/3 vote of the members present.

Rollin P. VanZandt moved that the North Central Region offer the Astronomical League $130.00 for publishing manuals. Orville Brettman seconded and the motion was carried after much discussion.

The meeting was adjourned at 3:40.

Respectfully,
Ronald E. Jones
Secretary

EDITOR'S CORNER



The May issue of The Reflector was a joy to behold. The League has long been wanting for a publication of members' research. Now we have a quarterly which is truly worthy of the title Journal of the Astronomical League.

When leaving the constitutional convention in Philadelphia, Benjamin Franklin was asked the type of government that the states would have. Franklin replied, "A republic, if you can keep it." A paraphrase might be appropriate to apply to the new format of Reflector. The League has, "A Journal, if we can keep it."

The Reflector needs your support. The biggest problem of most editors of such publications is the lack of articles submitted for publication. I know I have to scrape and dig to come up with enough news to fill out an issue of Northern Lights. I do not envy Mr. Gale the job of gathering material for Reflector. However, with your help the journal should expand and prosper in the years to come.

I have not seen cost information on the new format, but I assume that an increase over the old format is inevitable. Consequently, a dues increase is almost certain to be voted in at the August convention. If such an increase is necessary to support the continued publication of the revitalized Reflector, it is well worth the cost.

AUGUST 26TH IS DEADLINE FOR SEPTEMBER ISSUE