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WAS

The name of our club's newspaper is
the WASP

This name is taken from the first letters of
the words Warren Astronomical Society Paper

This is the WASP

August, 1971

It is curious that while the editor of this paper attempts to encourage support and contribution by members to produce an informative and meaningful exchange of ideas and information, he insists on retaining its antic and farcical name - by its very nature now witlessly parochial. If the title of a journal is at all indicative of its subject matter, it appears this paper can remain little more than whimsical in nature and content, at best incongruous.

This is not to suggest that the voices of mirth and astronomical parodies do not have a place among our pages; for, by its nature, the serious study of astronomy is as preposterous an institution as man's greatest attempts to govern his own kind. Therefore, it becomes apparent that a publication with a name as oblique and incredible as the WASP is utterly tolerable IF it is primarily intended to lampoon its victim in a round of sincere and meaningful ridicule and jest. However, if a paper's name suggests this kind of extravagant caricaturization and fails to deliver it with the self-contradictory regularity intended, the humor becomes empty; the journal is a farce.

Hopefully, 'WASP' was not intended as such astronomical balderdash. Had it been so, we would now be forced to admit its existence as a failure.

It is the opinion of some that we re-examine the possibilities for another, more substantial name for the journal of the Warren Astronomical Society. I feel it is our responsibility. And so I would propose a slate of suggested names to be compiled during the September general meeting followed by a general balloting of the members of the club to choose the title, in the same manner we arranged to have Stargate Observatory presented with its most excellent and proper designation.

It occurs to me that the present name was chosen some time ago in a moment of indecision after it was decided to start a club paper.

"What'll we call it?"

"You mean it has to have a title and everything?"

"I guess it seems proper."

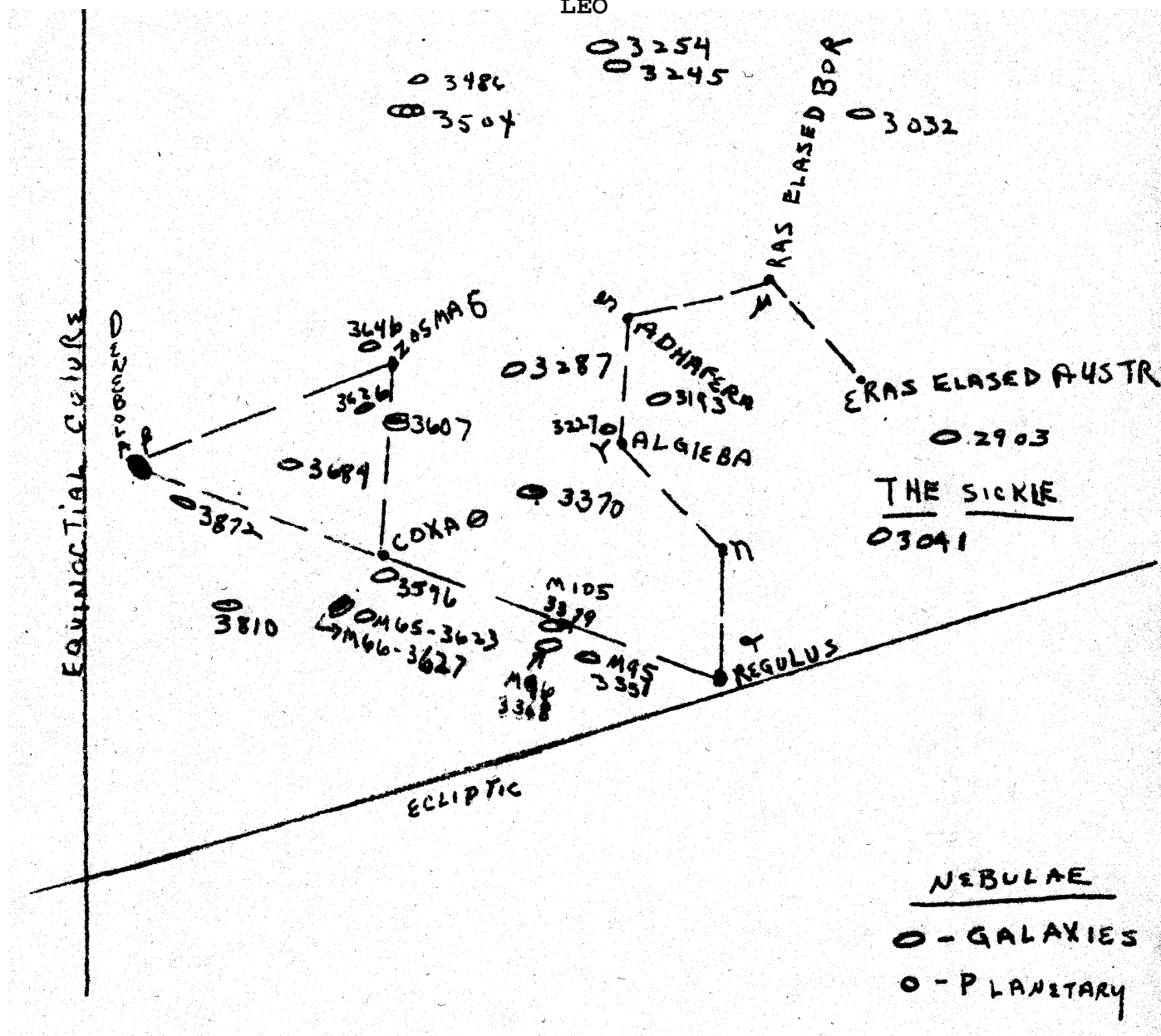
"Well," said the pragmatist, "how about the Warren Astronomical Society Paper!"

However, times have indeed changed. The pragmatic has become insipid and anile. People do not understand the ingenious abbreviation. I think we can do better.

Chris Edsall

The W.A.S.P. is published monthly as a privilege of membership by the Warren Astronomical Society. Contributions are always welcomed. Temporarily edited this month by Kenneth Wilson, with articles contributed by Chris Edsall, Mary Riley, and Timothy Skonieczny. Our regular editor, Frank McCullough, is in New Orleans.

CONSTELLATION OF THE MONTH
LEO



Leo, our next in a series of constellations, is the astrological sign for this month (August). It is hoped that both sciences can be combined to interest the audience.

Location- a line drawn from Pollux in Gemini, to γ region in Cancr, prolonged about 12° , locates the first magnitude star Regulus in the heart of the Lion. Regulus lies about 9° east of Cancer and about 12° northeast of Alphard in Hydra.

CONSTELLATION OF THE MONTH (continued)

Leo is one of the sky's oldest constellations, and has long been associated with the sun. According to Pliny, the early Egyptians worshiped the constellation Leo because the Nile inundation occurred, in ancient times, when the sun entered this constellation.

Some believe that the Sphinx represents the constellation Virgo's head on Leo's body. The name Regulus, borne by the star α Leonis, means the "Little King," which was named by Copernicus. It has also been called the "King," the "Mighty," the "Great," the "Hero," the "Ruler."

The early Persians regarded Regulus as one of the four Guardian stars of Heaven, the others being Fomalhaut, Aldebaran, and Antares. Four thousand years ago the longitude of this star was measured in Babylon, and two thousand years later by Hipparchus. Later on, his observations of Regulus and Spica led to his discovery of the Precession of the Equinoxes. Leo is very prevalent in the Indian and Egyptian zodiacs.

Leo is one of the most beautiful of the constellations of the Zodiac. It lies south of the Great Bear and its principal stars are arranged in the form of a sickle or a reversed "?", which marks the Lion's head. Regulus is in the handle of the sickle. It is one of the stars from which longitude is reckoned, and lies almost exactly on the Ecliptic. Regulus is 71 light years distant and is receding from us at the rate of about 1.5 miles per second. It is nearly 100 times brighter than the sun. Regulus is a white star of the Orion type, and is visible for eight months in the year.

γ Leonis is one of the finest double stars in the heavens. The colours of the two stars are yellow and green. This star is a well-known binary in very slow motion.

Leo has two very interesting Messier objects, M65; a large and brilliant nebula, and M66; the double nebula.

CONSTELLATION OF THE MONTH
(continued)

November is a famous month for meteors. A shower known as the "Leonids" radiates from the head of the Lion, marked by the sickle. It is due on the fourteenth or fifteenth day of November.

Leo, the Lord of Lights!

one as the sun is one

claiming the whole sky as its own

Leo- Lord of Lights!

bursts upon the scene with orange-yellow
splendor

Where pride walks

every room is a stage

every face a spotlight

every word and gesture etched in stone

With Rubies on him Royal Fingers

And Diamonds on his Regal Toes,

Proud Leo with life overflowing

will hear applause

wherever

he

goes!

(Thank you Zodiac and Olcott's Field Book of the Skies)

AFR ↓

CONVENTION AT OAKLAND

by

KENNETH WILSON

The 1971 Convention of the Great Lakes Region of the Astronomical League was held at Oakland University on August 6, 7, and 8. It was attended by approximately 75 persons.

The Friday night "good time hour" was attended by 30-40 people. Refreshments were served and the highlights of the evening were two tape/slide shows. The first one, entitled "The Empire of the Sun" was given by the D.O.A.A. This excellent slide show was a repeat from last year's convention, and was well received. The Warren Astronomical Society was well represented by the second tape/slide show concerning the club and its activities. It was received with mixed reactions.

Saturday consisted of papers, a banquet, more slide shows and a star party. Papers given were: an interesting examination of astronomical publications too often ignored by the amateur-given by Norman Sperling; an in-depth study of the flare star BY Draconis -- given by David Florkowski (D.O.A.A.); two new, and somewhat far-out, theories of cosmology - given by Jim Marron and Roy Van Euisen (G.R.A.A.); a study of corona structures -given by Paul Strong (M.C.C.C.); a new, luxurious, coffin-like (it's even called the coffin), insulated enclosure for the observation of meteors-given by Bob Ross (K.A.A.); a highway project which, if it takes either of two proposed routes, will severely hamper the observing at two major observatories-given by Gary M. Ross (D.O.A.A.); and a very interesting paper on amateur spectrography of stars and nebulae using a home-built spectroscope-given by Bob Moler.

At the banquet afterward, author, astrophotographer and A.T.M.er George T. Keene was the guest speaker. He spoke about his 20.f/5 Newtonian reflector and its silo-domed observatory, which he had just completed.

Mr. Keene also attended the star party that evening. Several instruments were set up, including Oakland's new, extremely well-mounted, 8" Cassegrainian/Newtonian reflector (used for the first time that evening). Also present was our own Larry Kalinowski and his 6" reflector. Mars, Jupiter and the moon were observed.

It is my understanding that a meeting was also held Saturday evening to discuss the feasibility of the revival of a region-wide periodical. I understand that the meeting was not very successful. But, something may still come of it.

Sunday two field trips were made. One, to the University of Michigan's radio telescope at Portage Lake; and the other to the McMath Hulbert Solar Observatory at Lake Angelus. I attended the latter. Our host gave us a thorough tour of everything. We were permitted to observe the sun and its prominences in hydrogen-alpha light through one solar telescope; the sun's projection by another; the solar spectrum through the spectroscope; and a solar movie in the observatory's library. All in all a very good field trip. Many thanks to our host.

A 27" f/6 astrocamera was offered to the club with the highest attendance at the convention. Despite the prolonging of the registration time and some question as to the authenticity of the W.A.S.'s membership in the league, it came to a 16-16 tie between the W.A.S. and the Kalamazoo Astronomical Society. Thanks to Lady Luck and a properly tossed Washington Quarter, we came out the winners. Sorry K.A.S., and many thanks to all the W.A.S. members that registered at the convention.

ALT-AZIMUTH GRID ALPHA

The little puzzle is from the "Prime Focus," originally composed by Norman Sperling. In the grid below are from 35 to 40 terms relating to solar or spectral topics. The words may be vertical, horizontal, diagonal, forward or backward. See how many you can find.

N	O	T	E	C	N	E	M	I	M	O	R	P
Y	D	O	B	K	C	A	L	E	S	F	O	S
D	C	P	R	E	O	I	L	U	C	O	L	F
R	U	S	S	E	L	L	N	S	R	O	O	R
O	D	N	I	W	L	I	G	H	O	P	C	A
G	A	R	B	M	U	N	E	P	F	H	A	U
E	N	F	E	M	M	E	Y	N	R	O	N	N
N	P	U	B	D	I	S	E	O	E	T	O	H
M	I	R	R	O	N	P	M	I	C	D	R	O
K	A	W	E	P	O	O	W	S	U	N	O	P
G	M	A	I	N	S	E	Q	U	E	N	C	E
F	F	V	G	P	I	Z	A	F	N	A	M	R
A	L	E	H	T	T	M	T	E	C	T	S	E
B	A	B	I	N	Y	L	R	R	Y	G	I	U
O	R	M	A	L	M	U	I	L	E	H	R	L
E	E	R	E	H	P	S	O	T	O	H	P	B

CONSTITUTION AND BY-LAWS OF
THE WARREN ASTRONOMICAL SOCIETY

1. This organization shall be known as the Warren Astronomical Society, and shall hereinafter be referred to as the Club.
2. The object of the Club shall be to promote and encourage the study of astronomy or related sciences.
3. Membership in the Club shall be open to all individuals interested in astronomy or related sciences, regardless of race, color, or creed upon payment of dues for one (1) year.
4. The officers of the Club shall consist of president, first and second vice presidents, two secretaries and one treasurer, who, with the immediate past president, shall constitute the Executive Board.
5. The president shall be the chief executive officer of the Club, and shall preside at all meetings of the Club and of the Executive Board, and perform such other duties as are usual for the chief executive. The president shall appoint all committee chairmen.
6. The first vice president or the second vice president, in said order, in absence, or inability of the president to serve, shall perform all the duties of the president. Both vice presidents shall be members of all committees that are appointed by the president. The attendance of both vice presidents at all committee meetings shall not be mandatory.
7. The secretary shall keep all records of the Club and minutes of all regular meetings. He (she) shall maintain a membership roster and notify all members of meetings of the Club. He (she) shall preside at any or all committee meetings upon request of the committee members.
8. The treasurer shall collect all dues and receive other monies as may come to the Club. He shall pay all bills which have been properly certified by the president or such members as authorized by the president.
9. The Executive Board shall direct all of the affairs and operating procedures of the Club, and on such matters as necessary for the consent of the membership, approval must be obtained by a majority voice vote of the membership present, after being duly notified.

BY-LAWS

1. The election of officers shall be held annually.
2. There will be a minimum of one general meeting per month.
3. Executive Board meetings will be called at the discretion of the President; except that one meeting must be called in any period of six (6) calendar months.
4. Additional Executive Board meetings may be called by a quorum of the Executive Board upon giving proper notification of such meeting to all Executive Board members.
5. The Executive Board shall determine dues for all classes of members; as outlined below: The term "dues" shall be meant to include subscription to "Sky and Telescope" unless otherwise indicated.

HONORARY LIFE MEMBERSHIP is conferred in recognition of extended and exceptional service to the Club or for recognized scientific achievements or reputation in astronomy or related sciences. It is granted upon recommendation of the Executive Board and approval of the membership. There shall be no dues. Such membership bestows all club rights, privileges, and facilities, but does not include a subscription to "Sky and Telescope".

HONORARY MEMBERSHIP is conferred in recognition of distinguished service to the Club. It is granted for one (1) year by the Executive Board and may be renewed annually. There shall be no dues. Such membership bestows all Club rights, privileges, and facilities, but does not include a subscription to "Sky and Telescope".

REGULAR MEMBER - a person twenty-one (21) years of age or older upon payment of dues - \$10.00.

JUNIOR/STUDENT MEMBER - a person twenty-one (21) years or younger upon payment of dues - \$6.00.

NON-SUBSCRIPTION MEMBER - a person who does not wish to subscribe to "Sky and Telescope" upon payment of dues - \$3.00.

6. Any member shall be expelled from membership by the Executive Board when in the judgment Of the Executive Board, the interest of the Club will be served thereby. The member shall have the right to demand and receive a copy of any charges and shall have reasonable length of time in which to present a defense to the Executive Board. The Executive Board shall then pass final decision upon the matter and upon a recommendation of two-thirds of the membership of the Executive Board, and provided such expulsion is approved by a majority of votes cast by the voting members in a regular or special meeting, the member's name will then be dropped from the membership roll.
7. At the Month prior to the Election month, the president will instruct the secretary to notify all members of the forthcoming election. Thus at the next meeting or election meeting the nominees may be voted into office.
8. Qualifications for officers:
 - a. Must be at least eighteen (18) years of age.
 - b. Must have been a member in good standing preceding election.
 - c. Must maintain his membership in good standing during the term of office.

9. A vacancy in the presidency or vice presidency shall be filled by appointment of the Executive Board. All other vacancies in offices shall be filled by appointment by the president. Any officer so appointed shall serve to the end of the unexpired term of the respective office.
10. As a matter of policy, the signature of the treasurer and one other designated officer shall be required on all checks. The treasurer shall carry no more than thirty dollars (\$30.00) in petty cash.
11. Any officer may be removed from office by the Executive Board whenever, in the judgment of the Executive board, the interest of the Club will be served thereby. An officer may be removed from the Executive Board, and provided such removal is approved by two-thirds of the voting membership.
12. Following adoption of this Constitution and By-Laws, any proposed amendments thereto must be submitted in writing to the secretary and then referred to the Executive Board at their next meeting. The secretary will read the proposed amendment at the next meeting of the Club following that of the Executive Board. At the succeeding regular meeting of the Club, the Executive Board will make known its recommendation and a vote by the membership will follow.
13. A majority of the membership present at a regular meeting shall be necessary to dissolve the Club, provided all members have been notified of such intent by mail thirty (30) days prior to the meeting. A date of dissolution shall be established after a period which shall comply with the legal requirements for public notice.
14. In the event of dissolution of the Club, the disposition of all assets (monies and properties) shall be decided by majority of the existing membership.

Sometimes the Magic Works.

"Which way to M 76?" asked Gene, as he turned down the volume of the tape recorder now pulsating with the cool music of a harpsichord.

Checking the atlas I said, "can you see Pi Andromedae? Go a degree and a half northeast and hang a left at Nu Andromedae, go up Andromeda's left leg until you hit her Zeta, then come across to Chi and Omega (they're in the same field); behind the spectroscopic triplet variable UG Andromedae, two degrees due north to Psi Perseii, through the Black Hole near the double cluster, past Tycho's Nova to the edge of the Milky Way just west of NGC 7446. It's a twelfth magnitude planetary. Can't miss it."

"Uh-huh," said Gene, as he turned and switched off the drive.

"... and Who are You?"

On the evening of 11 August 1971, President Frank McCullough of the W.A.S. called to order an executive meeting of the Messier Club in the gracious quarters provided by Mr. Kenneth Wilson on I-94 between Ann Arbor and Kalamazoo enroute to a meeting of the Kazoo Astro. Soc.

It was decided at this meeting that the W.A.S. would send a representative to the joint Astronomical League-ALPO Convention in Memphis, Tenn., August 19-21. Following the resolution, a unanimous and general vote sent Mr. Chris Edsall south to Memphis for three days of conventioneering, then east to the Mineral Bluff region of Georgia and N. Carolina to mine specimens of the area's abundant and renowned hoard of rubies, emeralds, sapphire, garnet, amethyst, and staurolite with no abstentions.

"Gee, Frank ,do you realize this will be the first time I'll see the Great Smokey Mountains? Do you know what that means to me, Frank?"

"No. What?"

"Not a damn thing."

And Sometimes it Doesn't.

"Hey, I just found M 76!" cried Gene, as he turned and knocked the finder scope out of alignment.

AN INVENTORY OF THE UNUSUAL

*** REDACTED 2011 - article reprinted from One Hundred Thousand Years of Man's Unknown History by Robert Charroux. MFR.

THE SKY OBSERVER'S GUIDE

A STELLAR BEST SELLER

Few books on observational astronomy can be a complete observers guide to the sky and be as useful to the beginning amateur as well as the more advanced. However, the "Sky Observer's Guide" is one. It covers just about all there is to cover about observing, and it does so in a short 160 pages. This book is so concise and easy to read that it can be read in one night, and the information one gains from it used the next night. Seventy three photographs and one hundred color illustrations are included to give the reader a more vivid introduction to observational astronomy.

"The Sky Observer's Guide" covers the moon, sun, and planets under three short chapters, and does so very well. It tells you what to look for in these objects as well as how to observe them, paying special attention to solar observing precautions.

Probably the most informative thing I have ever read about drawing sky objects is found in this book. Even a more advanced amateur might want to take notes from this chapter. Three pages in this book tells more than other books do in dozens of pages.

Other chapters of special interest are Star Charts and Setting Circles, Meteors, Stars, the Sky Observer's Camera, and Accessories and Maintenance. A condensed set of star charts is located in the last few pages of the book, listing many Messier Objects and several N. G. C. objects.

"The Sky Observer's Guide" can be purchased at any book store for \$1.25. This book should be in every amateur's library and especially at the telescope. This book is one of a series of "Golden Handbooks", all of which are excellent. Others you might want to read are "The Stars", "Photography", and "Weather".

Timothy D. Skonieczny

A BRIEF HISTORY OF THE MEUDON OBSERVATORY

by Timothy D. Skonieczny

Located about six miles southwest of Paris, in Meudon, France, is the Meudon Observatory. When it was founded in 1876, it became one of the most peculiar looking observatories in existence because it was converted from a medieval castle, retaining most of the appearance of the castle. However, looks aren't everything because it has become one of the most famous observatories in the world today.

The Meudon Observatory has survived two tragic fires, in 1795 and 1871, both of which almost completely burned down the entire observatory. New domes and research facilities have been added since, updating its age-old appearance.

Most of the research done at Meudon is solar, using one of the largest spectroheliographs ever made. This 52 foot-long spectrograph became famous in 1908 for detecting separate images to the successive components of the H and K lines of ionized calcium and the hydrogen H-alpha line. In 1929, it recorded the unusual evolution of a large solar prominence.

The observatory also houses a twin refracting telescope of 33 and 25 inch aperture, a 40 inch Newtonian reflector, a 10 inch and an 8 inch refracting telescope. Most of these telescopes were not installed until the early 1900's.

If you were searching the cosmos on the night of August 12th last in the irrational hope of seeing the Perseid meteor extravaganza of 1971, it is likely you found nearly as much disdain and disillusionment in the cyclic regularity with which nature unleashes its gadflies of the void upon an apprehensive Earth as we did at Camp Rotary that evening. Thus, to add outrage to insult and injury, I have reprinted the following ALPO report issued in December, 1966 for your annals of events of astronomical proportions.

Observing the 1966 Leonids

By Dennis Milon, Association of Lunar and Planetary Observers

The greatest meteor shower in recorded history was witnessed by a 13-man team of Tucson amateurs on 6850 foot Kitt Peak in Southern Arizona. A rate equal to around 150,000 per hour for a single observer was seen for about 20 minutes. This is perhaps twice the rate of the 1833 Leonids, when the peak rate for a single observer was 20 per second.

*** REDACTED 2011 - rest of article is available on Harvard website

Some said it was like a dream, an amateur astronomer's dream come true.

Unfortunately, on the night of November 16-17, 1966 in the Water-Winter Wonderland..... it rained.

Beautiful Bolide, come unto me;
Your firm round shape is so pleasant to see.

Fantastic Fireball, glowing so green;
If you burn up you will see what I mean.

(to be sung to the tune of "Beautiful Dreamer" by Stephen Foster.

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*** REDACTED 2011 - Article on Transient Lunar Events by Patrick Moore, F.R.A.S.
from the B.A.A. Journal

Nostalgia from the days when observational discovery was always possible touches one. However, this was only the beginning of a splendid series of anomaly observations of this crater and the curious lunar phenomenon of L.T.P. See the superb conclusion to this epic in future issues of this publication. C.J.E.

ASTRONOMICAL ALMANAC

by

KENNETH WILSON

<u>SEPT.</u>	<u>JUPITER'S¹ SATELLITES</u>	<u>EVENT</u>
1	23104	Twilight begins: 3:51 L.M.T., ends: 8:08 L.M.T.
2	34012	
3	4302*	Mars 6° south of the moon
4	42310	Mercury stationary, Full moon 11:03 P.M., Venus at greatest hel. lat. N.
5	42013	
6	41023	Lunar perigee: 0 ^h E.S.T., Max. Perseid Meteor Shower (rad.: 4 ^h 4 ^m , +36°)
7-15	d4013	Period of possible aurora displays
8	d4210	Mars at perihelion (129,000,000 mi.)
9	34012	
10	3042*	Mercury 0.5° S. of Regulus, Mars stationary, Saturn 7° S. of moon
11	23104	Last Quarter Moon 1:23 P.M., Twilight begins at 4:02 L.M.T., ends at: 7:50 L.M.T.
12	20134	Mercury reaches greatest western elongation of 18°(0 ^h)
13	10234	
14	02134	
15	21034	Mercury at perihelion, Uranus at 12 ^h 47 ^m -4° 22', Neptune at 15 ^h 55 ^m -18° 41'.
16	30214	Warren Astronomical Society General Meeting at MCCC.
17	31024	Jupiter 1.0° south of Neptune.
18	d3204	Mercury 4° north of the crescent moon.
19	42013	Saturn stationary in Taurus, New Moon at 11:42 E.S.T., AM.
20	41023	
21	40213	Uranus 6° N. of the moon, Lunar Apogee(6 ^h), Twilight : begins at 4:14, ends at 7:32 (L.M.T.).
22	42103	Aurigid meteor shower max.(rad.: 4 ^h 56 ^m , +42°.)
23	4301*	Autumnal equinox (fall begins): 11:45 A.M. E.S.T., Pluto in conjunction with the sun.
24	43102	Neptune 7° north of the moon.
25	43201	Jupiter 6° N. of crescent moon, Neptune nearby, Mercury at great. hel. lat. N., Antares .04° N. of moon.
26	240**	
27	10423	F. Q. moon 12:17 P.M. E.S.T., Aurora period thru Oct. 2.
28	02143	
29	21034	
30	32014	Mars 5° S. of moon.

(¹Numerical representation of the relative positions of Jupiter's moons to it(0). 0 on disc.
* = behind the planet)