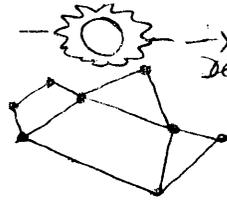


the "ECLIPTIC"

NEWSLETTER of
the LACKAWANNA
ASTRONOMICAL SOCIETY

SEVENTH PRINTING



DEC. 1981 - JAN. 1982

VOL 7 #6

LAS OFFICERS AND BOARD MEMBERS

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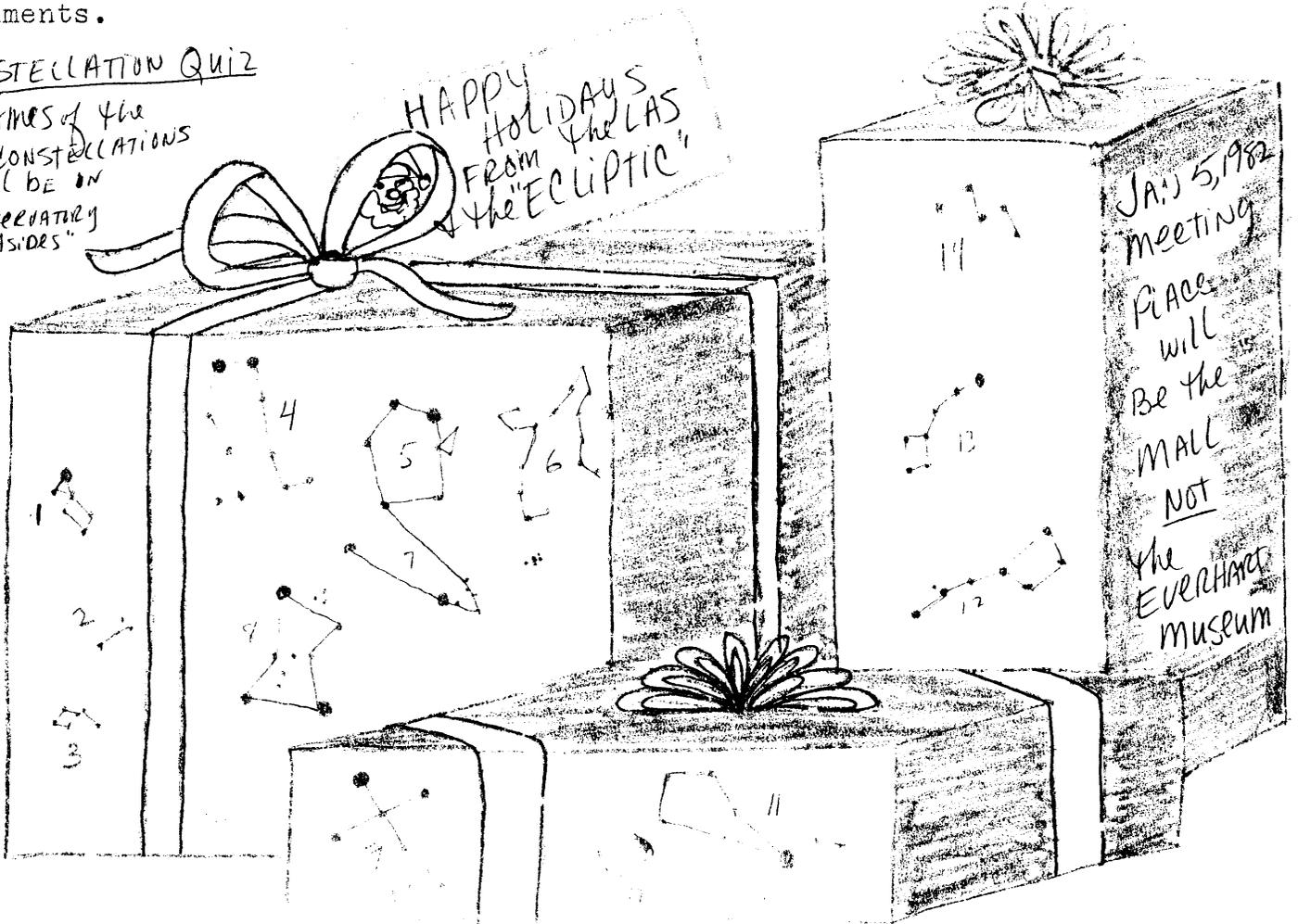
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JANUARY MEETING PLACE CHANGED

The Everhart Museum will be closed for inventory during the month of January. Therefore the LAS Meeting will be Tuesday, January 5, 1982 in the Community Room of the Viewmont Mall, by Sears. The main program will be Jo-Ann Pluciennik's talk about the Perseus, Triangulum, Aries region of the sky. This was postponed from the highly enjoyable December Christmas meeting, due to the weather that night, and partly due to eagerness to get to the refreshments.

CONSTELLATION QUIZ

NAMES of the
CONSTELLATIONS
will be on
"OBSERVATORY
ASIDES"



DUES ARE DUE

The LAS raise in dues was approved by the membership at the Christmas Party, 30 to 2. Remember to follow the new dues structure when paying for your membership for the coming year. Checks should be made payable to the "Lackawanna Astronomical Society," and sent to John D. Sabia, 1112 Fairview Road, Clarks Summit, PA 18411.

- Junior members - \$ 5.00
- Adult members - \$ 8.00
- Married Couples - \$12.00
- Contributing Members - \$20.00

The new membership list will include only names of those who are paid up for 1982.

CALENDAR OF EVENTS

Regular Meetings - 7:30 pm at the Everhart Museum, Scranton. PA. The January meeting, however, will be at the Community Room, Viewmont Mall.

Board of Directors' Meetings - 8:00 pm at the home of Jo-Ann Pluciennik. Any interested member may attend. Contact Jo-Ann to be sure of date and directions.

Club Nights - Contact John Sabia (586-0789), Jo-Ann Pluciennik (346-3268) or Joe Kamichitis (346-4562) to see about the availability of equipment and facilities on any clear Friday or Saturday night. Scheduled dates are the weekend after the meeting at KJCO/LASO, Fleetville, PA.

Month	Regular Meetings	Club Nights	Board Meetings
Jan.	5	8 & 9	19
Feb.	2	5 & 6	16

42 THROUGH THE 12

While 42 may, perhaps, be the answer to life, the universe, and everything, it is also the number of one of the most observed Messier objects in the sky and right now it's coming around into good viewing position. This is, of course, M42, the Great Nebula in Orion.

Probably you've seen it before, but if you've only used a 3 or a 6 inch telescope, you owe it to yourself to see it through the (soon-to-be) newly renovated LAS 12" reflector. Virtually any power or eyepiece will be rewarding, but for the really definitive view, for something to write home about, try one of those now famous 20mm Erfles. With a power of about 85 and a 3/4 degree field, responses thus evoked are: "Yow-zer!", and "Sue-wee!", and "Hubba-hubba!" -- terms you would not find in, say, John Sabia's notebook. Higher powers give your eyes more subtle, lacey, intricate detail in the nebulosity than you would ever hope to record on paper. On a good night, you can count six stars in the usually quadruple Trapezium. Put the 20 mm back in, follow the east arm of the nebula to a loose group of stars - the environs of Iota Orionis. This nearly 3rd magnitude double (triple, actually) star and several other doubles are set in a field of hard, diamond-like brilliance that, I think, deserves a little more attention.

Viewing M42 becomes habit-forming very fast and you'll find yourself spending a lot of time at the eyepiece, so much time that you may have to endure tirades of impatience from your companions. Fight them off - it's worth it.

Joe Kamichitis

OBSERVER'S NOTEBOOK
OH-NO000

I was informed by Jo-Ann Pluciennik, of a large naked eye sunspot during the second week of October 1981. Not having much time for solar viewing, I didn't see this magnificent spot at all. However, as it turns out, a beautiful northern lights display was visible on the evening of October 20. My wife, Dee, and I had just dropped off Jill Adelstein from a LAS Board Meeting. During the drive home I noticed a very bright, northern horizon; a harder look through the window showed us the pillars and rays.

From our home in South Abington Township we saw vivid red diffuse areas in the northeast, and pillars and arcs in the northwest. Not more than 35° from the horizon, the diffuse red area remained visible for 45 minutes of our viewing. Between 10:00 and 10:30 pm EDT, I photographed some of the activity with my 35mm camera. The next afternoon around sunset I used prime focus on the 4" f/15 refractor and my solar filter to capture the sunspot. It was then near the sun's edge.

So where are all these nice photos? I'm disgruntled to say I've become a victim of my own words about record keeping and being organized. I've misplaced the film. Numerous witch hunts have not turned it up anywhere. Well I do have all the exposures written down and my memories anyway.

John Sabia

NOW EVERYBODY SMILE

Your average meteors seen by the general public comes in two categories. There's the first type which is referred to as the "Ooh-ahh". An "Ooh-ahh" is usually on the order of a medium to slow speed, and about 2nd magnitude covering at least 5 degrees. Out-shining these seasonal shower members are the big "Wow." Now a big "Wow" surprises the observer by performing a variety of things. Some leave a persistent train, others explode at termination point or even split into two pieces and diverge.

Between being a regular observer of meteor showers and keeping an eye open during observing, I've seen many an "Ooh-ahh" and a handful of big "Wow's." However, had I been observing on Sunday, November 1st at 11:38 pm I'd probably be in a catatonic state. You ask, "Did it cast a shadow?" Cast a shadow?! This thing was so bright it lit up every living room, bedroom and bath in a 50 mile radius. Folks in Mountaintop, PA were waiting for the thunderous boom, but had to settle for some popping noises which rattled home windows and local business store fronts. Nearly the whole awake population of northeast Pennsylvania saw the flash. Very few people actually saw the bolide. Most eye witness accounts come from startled truck drivers and bewildered night shift patrol police.

A picture of a large bright bolide coming from a southern direction and heading north comes through. Some say it was sparking all the while with a long train. However no accounts of a termination point is heard of. Next morning I heard about it on the radio. So once again I was spared the fits of excitement, for I was sound asleep.

Next time, everybody smile.

John Sabia

OBSERVING THE DISTANT GLOBULARS

Mid-summer shows the Milky Way at its blazing best, early spring offers the best chance for a Messier marathon, and early winter (right now) gives you the opportunity to see in the same sky two of what, perhaps only I consider, the more fascinating objects around, namely NGC 7006 and NGC 2419, the distant globular clusters, the "intergalactic wanderers."

Most objects we see in the sky are so far away or so far apart that we can't really visualize the actual distances. Your average globular clusters may be 25 or 35 thousand light years away. These two babies are over

180,000 light years from us with 2419 being 210,000 light years from the Milky Way center! That's about as far as the Magellanic Clouds which are, of course, separate, independent galaxies.

With the 12½", NGC 7006 is the more visually impressive. This 11.5 mag. 1' diameter hazy spot shows a definite central brightening with just a touch of graininess. NGC 2419 is about the same magnitude and about twice the size but it shows neither hint of resolution nor any real change in surface brightness. To make up for its lack of visual excitement it presents itself in a nice eyepiece field at the end of a straight line it forms along with two bright stars.

That's how they look from here - how would we look from NGC 2419? From there we might look out at the Milky way and see our galaxy stretching across 1/6th of the sky with its nucleus maybe five times as large as the full moon and shining with the brightness of a zero magnitude star. The foreshortened spiral arms and large star clouds would be visible to the naked eye. With a 12" telescope you might be able to resolve some individual supergiants like Rigel and Deneb. A 6-inch would show some larger clusters and maybe just pick out M42 down somewhere around 11th magnitude. Even binoculars will keep some people happy for a lifetime.

Joe Kamichitis

STAR PUZZLE

BY BRIAN THOMAS

There are 14 astronomical and space terms hidden. The list is in "Observatory Asides."



OBSERVATORY ASIDES

The map enclosed, for the Perseus talk I'll be giving at the Viewmont Mall Community Room in January, includes objects for all size 'scopes. I used my 5" Rich field and the Astroscan (4½") for the clusters and major galaxies like M33, the 12" for the faint galaxies and the 9" for the doubles.

I like the smaller 'scopes because they're so wide-field. They're easy to use. The 12" is almost as easy to work with except for the added chore of ladder positioning and climbing. I was glad to find that because I had developed a poor self-image as an observer since I had always found the Clark so difficult to use, whereas John just about kicks it and finds some obscure NGC object (the one he wanted, too!) Using the 3" telescope on the Clark as a finder seemed impossible to me. Having no grip to speak of, I had trouble locking and unlocking the Right Ascension and Declination controls. (Pickle jars defeat me too.) Then there's the way dome ices up during winter and gets stuck, and won't rotate. I could almost hear the Clark's sneering "this wants to use our optics!!"

The 12 inch moves easily, has a height 8 x 50 finder; the roll-off roof lets me see the whole sky so I don't miss any constellations, or miss the

meteors; and there's no long line of ghostly observers watching my style of finding (just some heckling friends, who are easily ignored.) On top of it all, almost any NGC object is right where the charts say.

The Clark is glorious on the moon and bright planets, and I can find those objects with it, but for deep sky and hard to find objects, I love the 12".

I'm now at that point in my teaching career where everywhere I go, I bump into former students. To illustrate, while buying vitamins at the GNC, I found myself being waited on by a former 9th grade student of mine, who through some fluke of the time/space continuum has become 23 years old. It also seems he witnessed that super fireball of November 1st. Says it had two bursts of brightness; the second one being the brighter one. Bad enough he's getting older, but he has to see something I missed entirely. Even my sister and parents had seen the flash, while inside the house.

Jo-Ann Pluciennik

ANSWER KEYS

STAR PUZZLE

- Jupiter
- Moon
- Mt. Palomar
- Nebula
- Planets
- Quasar
- Reflector
- Satellite
- Saturn
- Spectrum
- Sputnik
- Star
- Star Cluster
- Sun

CONSTELLATION QUIZ

- 1. Lyra
- 2. Sagitta
- 3. Delphinus
- 4. Gemini
- 5. Auriga
- 6. Perseus
- 7. Taurus
- 8. Orion
- 9. Cygnus (for Bill Mecca)
- 10. Corona Borealis
- 11. Bootes
- 12. Ursa Major (Big Dipper)
- 13. Ursa Minor (Little Dipper)
- 14. Cassiopeia

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Joe Kamichitis

Handwritten note:
... are left behind at the ... Party of ...
... on ...