



Lorain County, Ohio

January 2019

Website: blackriverastro.org

Newsletter submissions: [Editor](#)

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--Wednesday, JANUARY 9, 7 p.m.: Astronomical video, topic TBD, Carlisle Visitors Center (NOTE: Carlisle Visitors Center is not open Jan. 2, hence the Jan. 9 date for regular meeting at Carlisle).

--Thursday, January 17, 7 p.m.: Board meeting, Blue Sky Restaurant, Amherst, OH

--Friday, January 25, 8-10 p.m.: Public Observing, Nielsen Observatory (cloud backup Saturday, January 26)

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Explore if you will the informative BRAS [website](#) and all its interesting, timely [links](#), and join the interactive members-only [BRAS Forum](#) to better keep in touch.

If you have any wanted/for sale announcements, astronomical photos you've taken, astronomy article links, equipment reviews, observing reports, essays, or anything that you think to which the local amateur astronomy community could relate, please send them to your [humble Guidescope editor](#) for inclusion in forthcoming issues.

Board Summary 12/13/2018

The December meeting of the BRAS Board of Directors was called to order by President Schauer at 7:14 p.m. with eight Directors present. Secretary Bill Ruth read the minutes of the November meeting which were approved as read with no corrections or additions. Dan Walker, our Treasurer, also supplied his monthly report which was accepted.

Committee reports followed with *Guidescope* editor Bill Ruth reporting that all was status quo, and the website was also reported to be in good shape. Our Instrumentation chairman, John Reising, has not been out to the observatory recently, but believed that the telescopes and ancillary equipment were performing as intended. The people who had attended the impromptu comet observing session reported that the damaged roof has not yet been repaired, so the roof was not opened and scopes were used outside. There were no OTAA or Metro Parks Liaison reports.

Programing is set for the first quarter of 2019 as follows:

January	Greg Zmina	Video on an astronomical topic TBD
February	Jeff Walsh	Video: Timothy Ferris
March	Dave Lengyel	Observing trip to Pahrump, Nevada
April	Tim Kreja	Colonization of Mars

The rest of the year is open. Members are invited to present talks on any astronomy-related subject. Feel free to contact any Board member.

Old Business followed with Schauer reporting on making Larry Janowicz a Fellow member of the association. After it was voted to do so in November, Mickey Hasbrook created a certificate to send to Larry, and Dan Walker donated a frame. Once the certificate was signed and framed, Schauer mailed it to Larry. Next came a report by Treasurer Walker on our current membership status. Since October, 11 members paid their yearly dues at the regular \$25 amount, 18 people paid the \$10 retired amount and we have 6 Fellow members who do not pay dues. This totals 35 members whose dues generated \$455. At a previous meeting the Board voted to lower regular dues from \$25 to \$20 and to eliminate the Retired rate of \$10 so that everyone pays \$20 to start next October. At our current 29 paid members, if we were on the new schedule we would generate \$580, allowing us a little more working capital.

The third item of old business was a discussion of the holiday pot luck. The Board was pleased with the addition of coffee. The coffee maker and coffee were provided by Mickey Hasbrook, the creamer and sugar were provided by Greg and Debbie Zmina, and Schauer provided cups. We also moved the tables into a square rather than three long rows in previous years. Next year we may push the tables together rather than leaving space in the middle. Finally there was a brief discussion on the impromptu comet observing session.

New Business came next. The first item came from Jeff Walsh, our Vice President and also our liaison with the Night Sky Network. The NSN provides pins and certificates to clubs that can be used to reward club members who are the most active. Jeff had a proposed list of pin recipients and the Board provided a few other names. Some people on the list already had pins and decided they didn't need another, and after brief discussion, the Board decided to order seven to be presented at an upcoming meeting.

Next came a brief discussion about the Geminid Meteor Shower which closely corresponded with our upcoming Public Observing session. The weather forecast did not look good, but we were prepared in case it was clear and we had a crowd. The final item of New Business was a reminder by Schauer about the upcoming total lunar eclipse. This eclipse is on Sunday night, January 20th into the morning of January 21st. The eclipse begins at 9:36 p.m. on Sunday the 20th with max eclipse at 12:12 a.m. on Monday morning the 21st with the eclipse ending at 2:48 a.m. The Board discussed the possibility of a public eclipse party, but the event happening on a Sunday night and ending very late, coupled with the cloudy weather expected in January, may make this problematic. It was decided not to plan anything formal with the Metro Parks in advance. Instead we will watch the weather forecasts as we get close to the date. If the weather looks good we can have an event and announce it on the LCMP website and on the BRAS Facebook page.

January dates were set, and the meeting was adjourned at 8:12 p.m.

~Steve Schauer



Comet 46/P Wirtanen, 12/9/18, taken from Nielsen Observatory

~Lee Lumpkin

Deep-Sky Objects for January

Objects for Binoculars							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
06 ^h 32.4 ^m	+04° 52'	NGC 2244	4.8v	23'		Mon	Open Cl in Rosette Nebula
06 ^h 41.1 ^m	+09° 53'	NGC 2264	3.9v	20'		Mon	OC 40• "Christmas Tree Cluster"
07 ^h 03.2 ^m	-08° 20'	M50	5.9v	16'		Mon	Open Cluster 80•
07 ^h 36.6 ^m	-14° 30'	M47	4.4v	29'		Pup	Open Cluster 30•
07 ^h 41.8 ^m	-14° 49'	M46	6.1v	27'		Pup	Open Cluster 100•
07 ^h 44.6 ^m	-23° 52'	M93	6.2:v	22'		Pup	Open Cluster 80•
Objects for Small Telescopes (2-6 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
06 ^h 23.8 ^m	+04° 36'	Epsilon (AB)	4.5, 6.5	13.4"	127°	Mon	Double Star
06 ^h 51.8 ^m	+00° 28'	NGC 2301	6.0v	12'		Mon	Open Cluster 80•
07 ^h 37.5 ^m	-12° 04'	Melotte 71	7.1v	9'		Pup	Open Cluster 80•
07 ^h 38.8 ^m	-26° 48'	k Puppis	4.5, 4.7	9.9"	318°	Pup	Double Star
08 ^h 05.3 ^m	-28° 10'	NGC 2527	6.5v	16'		Pup	Open Cluster 40•
08 ^h 10.7 ^m	-12° 50'	NGC 2539	6.5v	21'		Pup	Open Cluster 50•
Objects for Medium Telescopes (8-14 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
07 ^h 08.3 ^m	-10° 39'	NGC 2343	6.7v	6'		Mon	Open Cluster 20•
07 ^h 17.8 ^m	-15° 37'	NGC 2360	7.2v	12'		Cma	Open Cluster 80•
07 ^h 41.8 ^m	-14° 44'	NGC 2438	11.0v	66"		Pup	Plan Neb in M46
07 ^h 41.9 ^m	-18° 13'	NGC 2440	9.4v	14"/32"		Pup	Planetary Nebula
08 ^h 00.2 ^m	-10° 47'	NGC 2506	7.6v	6'		Mon	Open Cluster 70•
08 ^h 00.7 ^m	-19° 04'	NGC 2509	9.3p	8'		Pup	Open Cluster 150•
Objects for Larger Telescopes (16-inch & larger) Challenge Objects							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
06 ^h 32.3 ^m	+05° 03'	NGC 2337-39	-	80'x60'		Mon	"Rosette Neb" (Use O-III filter)
06 ^h 39.2 ^m	+08° 44'	NGC 2261	-	3.5'x1.5'		Mon	"Hubbles Variable Nebula"
06 ^h 49.0 ^m	-36° 00'	NGC 2298	9.4v	6.8'		Pup	Globular Cluster
07 ^h 38.4 ^m	-10° 41'	Melotte 72	10.1p	9'		Mon	Open Cluster 40•
07 ^h 47.4 ^m	-27° 20'	NGC 2452	12.0v	19"		Pup	Planetary Nebula
07 ^h 47.8 ^m	-27° 14'	NGC 2453	8.3v	5'		Pup	Open Cluster 30•

Print and use the [Deep-Sky Interest Group - Observation Form](#) to record your observations.

DSO chart courtesy of Len Jezior

Space Race 2 in the Near Future?

A sequel to the 1960s Space Race that culminated with the United States landing on the Moon in 1969 may be in the future. Early last month, both the United States and Russia announced plans to go to the Moon with the intent of setting up permanent bases. The Russian announcement came just one day after NASA announced its plans.

First up: the American plan.

In its plan, NASA announced that it plans to partner with the private sector in working together to set up a permanent lunar base. NASA has already announced nine partners in the project.

The American plan is to start slow. Initially, new technologies will have to be developed. The next step in the process will be robotic and then short-term manned missions similar to those of Apollo. The culmination of the project will be a permanent lunar base. Once that is complete, NASA is already looking farther into the future in the form of a trip to Mars using the new technologies and equipment pioneered on the Moon.

As for timetables, NASA has lofty goals. NASA administrator James Bridenstine has suggested that the first robotic missions could launch as early as later this year and that a permanent American base could be established within the decade. Sound unreasonable? Well, consider this: we went from being an Earth-bound nation to landing a man on the Moon in just eight years spanning 1961-1969, proving that we are capable of great, one could say even miraculous, things when the political will is there. The key question: will our leaders make creating a permanent Moon base a national priority as they did landing on the Moon in the 1960s? Interestingly, an outside force could become a driving force once again.

Enter Russia.

Just one day after NASA announced its ambitious plans, Roscosmos, the Russian space agency, announced that it seeks to build a permanent Russian base on the Moon by 2040.

The Russian plan will go in three stages. First, there will be a Russian space station put into orbit around the Moon. This will serve as a launching point for phase two: manned missions to the lunar surface. The last phase will be a permanent base. According to Roscosmos, the Russians are already studying several sites for their viability as potential locations for their base. The Russians have also made it clear that setting up a permanent lunar base is their top priority in space policy.

Where will this go? Only time will tell. Hopefully, with a competitor to think about (and beat for a second time), NASA will regain the singular focus and political backing that propelled us to the Moon half a century ago.

~Denny Bodzash



Venus, Mercury and Jupiter on a rare clear December morning in Ohio, 12/17/18, 6:52 a.m. Venus is highest, then Mercury, then Jupiter. 1600 ISO, 18mm, 0.5s

~Dave "my feet are cold" Lengyel



Earthrise, taken by crew of Apollo 8 on December 24, 1968