MEETOR is the official publication of the Greenbelt Astronomy Club and is distributed monthly as a privilege of membership. Articles and other contributions are welcome. Membership in the Greenbelt Astronomy Club is open to anyone interested in astronomy. The club meets on the last non-holiday Thursday of the month at 7:30 pm EDT at the Owens Science Center. The address of the Editor is: G.W. Gliba, 58-D Crescent Road, Greenbelt, Maryland 20770.

Greenbelt Astronomy Club

The monthly meeting was held on July 25th at the Owens Science Center. The Science Teachers Workshop, supported by a STScI grant, will have their second session at the Owens Science Center on August 13th. Contact Dr. Tom Bridgman if you can help at 301-286-1346. He needs help to show teachers how to use 2.4-inch refracting telescopes for classes. Tom has set up a WWW site for us at: http://heawww.gsfc.nasa.gov/~bridgman/STELLAR/STELLAR.html. IDA dues were voted on and paid for the next year.

We will have a Labor Day table again from Noon to 5:00 pm EDT on Saturday, August 31st. Displays on Light Pollution and the club will be held. Ideas for grants for the Greenbelt Public Observatory were mentioned. President Doug Love said this is the time to look for grant money. The club voted to join the Astronomical League. Sue Bassett said that the 1998 Eclipse Trip to Curacao still has space, but that many other islands and trips are booked solid already. To get more information write to: ATS-EC98, P.O. Box 2509, Laurel, Md. 20709.

Comet 1996 N1 - Brewington

A new comet was discovered on July 4th (UT) by the American comet hunter Howard Brewington of Cloudcroft, New Mexico. He used an 8-inch reflector to sweep it up visually. According to IAUC 6428, the comet was about 10th magnitude when he discovered it. This is his 5th comet find. The comet can be seen in the evening sky at the following locations taken from IAUC 6435:

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Did You Know? - Taken from the July 1996 NAMN Newsletter - by Mark Davis

The brilliant trail that a meteor produces consists of ionized gas. A typical sand grain sized meteor trail is about a yard in diameter. But we see it as a thin line. The energy departed from the velocity of such a meteoroid ionizes air molecules at a relatively large region from the center of the meteor's path. The residue from it contributes a relative small amount to the visible part of the bright meteor.

Perseids and Possible New Perseid Radiants - by G.W. Gliba

The prolific Californian meteor watchers Robert D. Lunsford and George Zay may have found yet another new radiant. While watching for early Perseids and other minor shower meteors, a radiant was noticed near Eta Perseus on the night of July 16/17. This may be yet another new radiant discovered by this observing team. Bob is probably one of the best American meteor observers of all time, and George is currently one of the best in the country; so it is only natural that they find more than the average meteor observers. Anyway, a couple nights later no activity was spotted from this area.

According to British Astronomical Association (BAA) meteors section recorder Niel Bone, there aren't any recognized new radiants near the traditional Perseid radiant near maximum, but pre-maximum radiants are another matter. Some, like the proposed Alpha-Beta Perseids, have been suspected but not confirmed by the BAA for many years. This shower near Eta Perseus, if it exists, has probably not been seen before, and can't be related to the classic Perseid stream, according to comet and meteor expert Gary W. Kronk.

I also saw what seemed to be a minor outburst of Perseid-like meteors that were coming from the area of Xi Persei two years ago, on Aug 5/6, 1994, while meteor observing at the annual Stelafane convention in Vermont. Seven meteors were seen from this radiant, five in only one hour. As far as I know, this is another possible new radiant. Look for this radiant this year to help confirm if it exists, and if it is annual or periodic in nature.

Could this new radiant possibly be related to the recent passage of the parent comet P/Swift-Tuttle a few years ago? Are there others that are new and waiting to be discovered by diligent amateur astronomers? More data is needed to help sort this puzzle out.

The traditional Perseid maximum will occur under ideal conditions this year. On the morning of August 11/12, which is a Sunday night, observers can expect to see up to 60 meteors per hour under dark sky conditions. According to the International Meteor Organization (IMO), the traditional peak will be at 14 hours UT on the 12th, which is 10 am EDT on the morning of August 12th. Perseid meteors can be seen before and after that time, but the rates will be about 75% or more lower than at the maximum, the day before and after.

I say traditional peak, because another earlier maximum was found by the IMO observers before and after the perihelion passage of comet P/Swift-Tuttle, that was twelve hours before the usual peak. That will occur at 8:30 pm EDT on the
evening of August 11th, according to the IMO. At that peak in 1993 and 1994 up to 400 meteors (ZHR) was seen for a short time by observers in Europe and the Middle-East respectively, but enhanced activity has been seen from 1991 to 1995.

The IMO early peak prediction favors Europe again. However, Marco Langbroek, of the Dutch Meteor Society, predicts the 'outburst' peak will be at 5 hours UT on August 12, instead of near 0:30 UT, as previously predicted based on a new study of the Perseid stream orbit! This favors us, as that is 1:00 am EDT on the morning of August 12th! Both predictions are considered accurate to +/- 1 hour. However, don't be disappointed if nothing happens around either 5:00 or 0:30 UT this year, but be aware that it may still happen anyway! Or it may not happen. In any case, the regular peak is a sure thing, but there may be fireworks if we see the 'outburst' peak predicted by Marco Langbroek.

Source - NAMN meteorobs network

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Northway Fields Public Star Party

The July 20th Northway Fields Public Star Party was a big success. There were an estimated 50 people who attended. Several members brought telescopes. Tom Bridgman and Matt Elliott each brought 4.25-inch Astroscans, Doug Love his homemade 6-inch f8 reflector, Nelson Wallace his homemade 6-inch f8 reflector and 2-inch refractor, Charlie Goldsmith his 8-inch Ultima, Frank Coorsen and Eileen Campbell a 8-inch Celestron with CAT (Computer Aided Telescope), Bill Hathaway his 4.25-inch RFT reflector, Lynne Gilliland a 5.5-inch SNT, I had my 4-inch f9 refractor, and Al Havrilla, who came with Bill, had a pair of giant 11 x 80 binoculars. Several other members came and brought smaller binoculars. Some members of the Goddard Astronomy Club also attended and brought their own telescopes. There were 12 telescopes all together to show the public the stars.

Besides various double stars, star clusters, and nebulae being observed, comet Hale-Bopp was shown to the public. We told them that it was on the way in and that it might be better than comet Hyakutake was. Several meteors and a few satellites were also spotted. It was a beautifully clear night, with the Milky Way being visible despite the light pollution. The next Northway Fields Public Star Party is scheduled for August 24th.

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Some Dates to Remember

August 5/6 - Possible New Xi Perseid Meteor Shower?
August 9th-11th - Stellafane
August 11/12 - Perseid Meteor Shower Maxima
August 14th - New Moon
August 24th - Northway Fields Public Star Party
August 29th - Greenbelt Astronomy Club Meeting
September 6th-8th - Blackwater Falls Astronomy Weekend
September 12th - New Moon
September 11/12 - Maximum of Aries-Triangulid Meteor Shower
September 26th - Greenbelt Astronomy Club Meeting
September 28th - Northway Fields Public Star Party

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