UNIVERSITY
LOWBROW
ASTRONOMERS

NEWSLETTER

July Volume 2 No3

Lowbrow Corner

If you had read last month's newsletter you would have been expecting a brand new newsletter this month. Obviously this is still the same old newsletter. Unfortunately, the responce to the Name the Newsletter contest was less than expected, so we are extending the contest for another two weeks. Just come up with a new name for the newsletter and send it in. Your idea does not have to be earthshattering or spectacular, and all ideas will be considered.

The new deadline for entering is Friday,Aug. 24. See last month's newsletters for details on prizes. Submit entries to

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The Conquest of Space

The twentieth of this month was National Space Exploration day, established to commemorate the day in 1969 when men first set foot on the moon. This day brought back my fondest memories of the Apollo program, watching the launch of Apollo 15 in June of 1971.

The weather that morning was perfect for a launch. At least I remember it that way. Since I was only nine years old, I did not care about the weather. A rocket was going to be launched, therefore the weather was perfect.

Across the water, three miles away, was the Saturn IV. The general public was not allowed closer than five miles from the launch site, but my father somehow managed to get us a spot better than average from which to observe. There few people in this area, and they caused no problem in getting a perfectly clear view of the rocket.

I did not learn until many years later that we could have been in great danger if the rocket had exploded. But how could the possibility of an explosion have entered my mind? This was no mere rocket I was looking at. This was a Saturn IV, the mightiest thing ever built by Man. To me

it was huge even three miles away! A gleaming white spire sprinkled with beautiful black markings, reaching for the heavens. A beacon pointing the way toward space, where one Man would travel regularly.

Several people around us had portable radios from which I could hear garbled speech until...The Countdown. My anticipation grew as the numbers were counted off. Then, an orange glow and brown smoke; activity from a seemingly unchangeable object. A hush fell over the crowd as the smoke and flame grew -- all in complete silence! Never before have I experienced such a silence as we all stood there shocked by the absence of sound. Forgetting I was three miles away, I aws stunned by the silence. The engine start was so dramatic that I felt as if I were right next to the Saturn IV.

I did not realize, as the smoke and flame increased, that the smoke was being deflected in our direction. Seconds later the rocket was hidden from view sa it became engulfed in smoke. An air of worry fell over the crowd as we all seemed to have a slight thought that... no, it couldn't have...not a moon rocket... no, there it was! Our rockets didn't blow up any more, not for some time. I was relieved to see the escape tower rise slowly, ever so slowly out of the horrid brown smoke. Like phoenix rising from its ashes, the Saturn probed skyward, the beginning of another chapter in the greatest adventure of human exploration.

The rocket continued rising true and steady when,Sound! Sound as I have never heard began. It started as a low rumble and soon grew to gigantic proportions. Louder than the loudest thunder a deep rumble roared across the land as the ground shook beneath my feet, as if in awe of the awakening of the giant leviathan rising before us. Time seemed to stand still in its tracks as the rocket arched ever higher.

I watched until it was out of sight then returned to Earth. It happened so quickly yet lasted so long. Nothing mattered to anyone there watching as the rocket lifted off. War, riots, starvation, didn't exist, only a rocket blazing into the heavens. And when it was over an example, ahope. An example of the greatness humans can achieve when they try, a hope that that ability will be applied to both endevours in space and problems here on Earth.

WHAT'S UP
(Events in the Skies of Ann Arbor)
7/24/81--8/21/81
All times are E.D.T.

July 24 Moon at last quarter. Peach Mountain 24-in. open for general observing tonight and tomorrow night if clear.

Sat. 25 Moon rises about 2:15 a.m. on Sunday.

26 Look for the Pleiades north of the waning crescent moon in the East after about 2 a.m..

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30 Moon new; Solar eclipse in Siberia.

31 Astrofest with Jim Loudon; "Voyager 2's Mission to Saturn: a Preview" with Voyager 1 update. If clear, club members will probably show the public sunspots, and the Moon and planets respectively before and afterwards.

Aug. 1 Peach Mountain 24-in. open for general observing if clear. Moon sets about 10:00 p.m..

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4 Moon passes just North of Jupiter and Saturn this evening.

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7 Moon near first quarter, sets about 1 tomorrow morning.

Sat. 8 Peach Mountain open for general observing; see Perseids on August 12. Moon sets about 1:30 tomorrow morning.

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12 Persid meteor shower: Different sources calculate the peak at 1 a.m. and 9 a.m.. Usually about 60/hour with many lesser showers also occurring about now.
In addition to competing with the Geminids of December as the shower with the most numerous meteors, the Perseids also deliver some of the brightest and most colorful meteors. Come on out and see them in the dark skies above Peach Mountain either tonight or Saturday night when there may be up to 15 per hour. The best time to watch will be roughly between 3:30 and 5:00 a.m. on the 12th. That is: after moonset but before twilight begins.

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Sat. 15 Moon full and in sky all night.

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Aug. 21 August meeting of the University Lowbrow Astronomers 8:30 p.m., location to be announced.

Sat. 22 Moon at last quarter , rises about 12:15 tomorrow.

The Brighter Planets

Venus appears ever higher in the evening twilight as the year progresses. With the unaided eyes it looks much like a star, but it can be told from the stars by the fact that it's about twenty times as bright as the brightest stars in the sky. It sets about two hours after the sun for the next month or so. Jupiter and Saturn are to Venus' upper left (to the northeast) and they'll be lost in the sun's glare by mid- to late September. Mars is climbing higher out of the morning twilight, and by August 24 it rises about 3:30 and is up the rest of the night. At the beginning of August it rises about 40 minutes before morning twilight begins. Mercury rises into the twilight an hour and a half after Mars on July 28th--it then rises later and later, becoming lost in the sun's glare.

In July, weather-fronts traveling eastward across the United States tend to pass further north. Often the heat-haze of afternoon is not cleared away by thunderstorms as in June.

In July, twilight lasts all night in Britain.

Noctilucent clouds (Latin, "night-shining") are seen between mid May and early August; most frequently in the first half of July about an hour after sunset, on the northern horizon (sometimes about an hour before sunrise, on the southern horizon). They occur north of latitude 45° north (and have recently been seen south of 45° south). They are far above all other clouds, 75-90 kilometers — at about the mesopause, or boundary between the top of the mesosphere and bottom of the thermosphere. They are seen when they still catch sunlight while the ground below and the sky behind are dark. They have a gold edge near the horizon, are bluish-white above, and ultimately become all silvery blue-white. They move at great speeds, 150-800 kilometers per hour, usually from the northeast or east. They are thought to consist of meteoric dust; they are at the height where most meteors flash and disintegrate. Unlike aurorae, they are more frequent when sunspots are at minimum. They are not to be confused with nacreous or mother-of-pearl clouds, the rare highest kind of normal clouds made of water and ice; these are 22-31 kilometers up. But the beautiful mother-of-pearl clouds seen on 1910 May 19, the day earth passed through the tail of Halley's Comet, were perhaps really noctilucent clouds made of comet-dust.

In July evenings the central bulge of the Milky Way is as high as it can be in the south. It is richer in star-clouds than the "winter" Milky Way, though its constellations formed by bright individual stars are not so prominent.