

Vol. 1, No. 5

JULY, 1975

During the month of July things begin to slow down a bit for the P.A.A. Quite a few members have gone on vacation although there should be sufficient members to supply a few good meetings this month.

The Summer Triangle has begun to make its annual appearance in the eastern sky. This object is composed of three prominent stars Vega, Altair, and Deneb located in the summer constellations of Lyra, Aquila, and Cygnus respectively. The region enclosed by the Summer Triangle contains a part of the Milky Way as well as some nebulae and at least three interesting groups of double stars.

Harry mentioned to me that he observed a single large sunspot on the sun's surface recently. During a period of minimum sunspot activity this is a rare treat. Take a look for it (remember - don't look at the sun's surface directly without a filter, using a sun screen is even better).

The Constellation Postcards have all been sold. The response has been so enthusiastic that more will be ordered in the near future.

Meetings:

The P.A.A. meets Friday evenings at 8:00 p.m. in Wallis Hall Seminar Room 1, Catherine Parr Traill College near the corner of Reid and Dublin streets. Members will be phoned if a meeting is to be held as scheduled.

The May 30 meeting was attended by Harry, Karen, Jeff H., Bruce, Aruna, and Dean. We discussed plans for building 4" RFT's (Rich Field Telescopes). The idea was to build these small 'scopes with a tube diameter of 6", a length of between 16 and 20 inches, and construct them so that they would provide a magnification of 20X (three times that of binoculars). The telescopes would be sold to Association members at cost (about \$30). Also during the meeting Harry gave a short lecture on coordinate systems.

The June 13 meeting was attended by Harry, Frank H., Bruce, Aruna, Ian, and Dean. There was more discussion of telescope making and Harry gave a lecture on how to test optics.

Association Activities:

President Harry Adams plans to make up a set of eight star charts which will be printed and distributed amongst the membership. It is hoped that soon each member will have their own personal reference material for studying the sky.

On July 1, just before the Newsletter went to press, a Constellation Study Night was held at Frank Hancock's place on the centre line of Smith Township. It was attended by Harry, Jeff, Dean, and Brian and it was concentrated on a study of the southern and eastern constellations visible this summer. It began at 11:00 p.m. and continued until just after 12 midnight.

Astronomy News:

The Apollo-Soyuz Test Project is set to get underway on July 15. Barring delays the 12 day mission to link, for the first time, a Soviet and an American manned spacecraft will proceed at 8:20 a.m. with the launching of the Soyuz followed 7½ hours later by the launching of the Apollo. After a number of orbits the two vehicles will rendezvous and dock together for a period of 2 days.

During docking the crews will exchange for part of the time testing the compatibility of the two spacecraft. Also, both during and after the linkup, many scientific experiments will be performed.

The three American astronauts on this mission are Thomas P. Stafford, Vance D. Brand, and Donald K. Slayton. The two Soviet cosmonauts will be Aleksey K. Leonov and Valeriy N. Kubasov.

The Sky in July:

Mercury - in Taurus, mag. 0.7; rises only 1¼ hours before the sun on the 4th

Venus - in Cancer, mag. -4.2; lower in the west but at maximum brilliance on the 21st

Mars - in Aries, mag. 0.6; rises at midnight one hour after Jupiter

Jupiter - in Pisces, mag. -2.0; now visible in the late evening

Saturn - in Cancer; not visible this month

Moon - last quarter, July 1, 31; new moon, July 9; first quarter, July 15; full moon, July 23; occultation with Mercury on July 7, Mercury mag. 0.4

Meteors - Capricornids: July 26; not very many, 6 per hour, period of 30 days
Delta Aquarids: July 29; very good, about 30 per hour, 30-day period

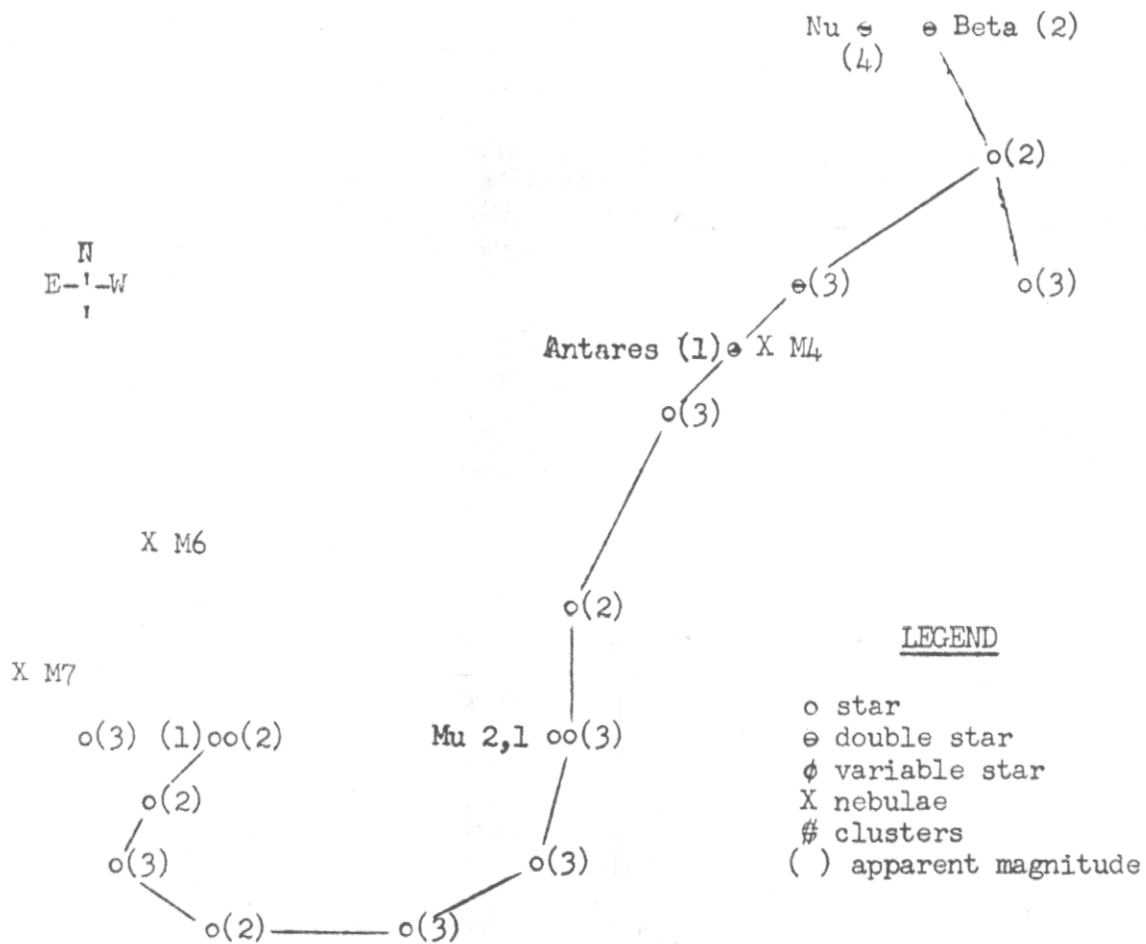
Each month a constellation is featured to help members familiarize themselves with the night sky. If between 8 and 9 p.m. you follow an imaginary line running north and south from directly overhead (the Celestial Meridian) the featured constellation will be found along this line. This month's constellation is Scorpio (the Scorpion).

Scorpio is the most aptly named of all the constellations, bearing considerable resemblance to a giant scorpion with its stinger poised to strike. A huge red star, Antares, is the brightest star in the constellation with a magnitude

of 1.2, making it the 16th brightest star in the sky. There are many objects worth observing with binoculars in this constellation; it lies in the Milky Way and is rich in countless stars. M6 and M7 are open clusters visible to the naked eye and Nu Scorpii is a field glass double. Mu Scorpii is a fine wide double visible to the naked eye.

Scorpio

<u>Double Star</u>	<u>Magnitude</u>	<u>Distance (sec.)</u>	<u>Remarks</u>
Antares	1.2-5.2	3	Red - Green
Beta	2.8-5.0 -5.0	1 - 14	Yellow - Green; good contrast
Nu	4.3-6.5- 7.0-8.0	1 - 41 - 2	Quadruple; most beautiful in sky



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