## Autumn sky to appear

## By Vernon Whetstone

Amateur Astronomer

The second crown jewel in the summer sky—the first being Scorpius—is Sagittarius, the Archer located right next door to the left of Scorpius.

It will be at its highest above the southern horizon at about 10 p.m. local daylight time these mid-summer evenings.

Although the constellation represents an archer in the form of a Centaur, the half human, half-horse of mythology, modern astronomers generally give it the shape of a teapot.

Four modestly bright stars form an almost square with a triangle for a top, a triangle for a spout on the right and a loop of stars on the left for a handle. The constellation is about as large as your fist held at arm's length.

If imagined as the archer, his bow is drawn with the arrow pointed at the reddish star Antares, the heart of the scorpion.

Back to our teapot. If you have very dark skies, the broad starry band of the Milky Way will be seen rising in the south looking almost like steam coming out of the spout of the teapot. This area is a wonderful playground for anyone with binoculars or even a small telescope.

Starting directly above the spout, start your tour with M20, the Trifid Nebula and M8, the Lagoon Nebula. Both can be seen in the same binocular field of view. You might also be able to see the bright open star cluster, M21, to the upper left.

Move one field of view slightly to the upper right for another open cluster, M23, another field of view slightly to the upper left to find M18, the Black Swan open cluster and M18, the Omega Nebula and in the same field of view, directly above, is M16, the Eagle Nebula.

The Eagle Nebula is probably most famous for the image taken by the Hubble Space Telescope of two pillars of gas and dust which were named the "Pillars of Creation" because there are numerous stars being formed within them.

Alas, you won't be able to see them without a large telescope, but you can see the faint glow of nebulosity from the cluster.

Don't stop here. Slowly cruise up following the band of the Milky Way for other star clusters and nebula. It will be an entire evening's entertainment.

August first is often called a "cross-quarter day." A cross-quarter day means a date roughly halfway between a solstice and an equinox. In this case, it would mean that summer is half over and we are now approaching the autumnal equinox.

In the Anglo-Saxon calendar it was a day to pay rents and settle accounts. It was also called Lammas Day, or Loaf Mass Day which was celebrated by baking a loaf of bread from the newly harvested grain and bringing it to the church in thanksgiving for the harvest.

With that thought in mind, since you are already outside at about 10 p.m., looking at Sagittarius, take a look to the east. There you will find the Great Square of Pegasus just above

the horizon. Pegasus is the first major constellation of autumn.

SKY WATCH: New moon, Aug. 6. The moon will be near Jupiter on Saturday, Aug. 3, about a half-hour before local sunrise, then just below Mars Sunday morning. If you have a good, clear horizon you might catch a glimpse of dim Mercury to the moon's lower left. Binoculars will be essential.

NEXT WEEK: The great Perseid meteor shower and more astronomical blathering.