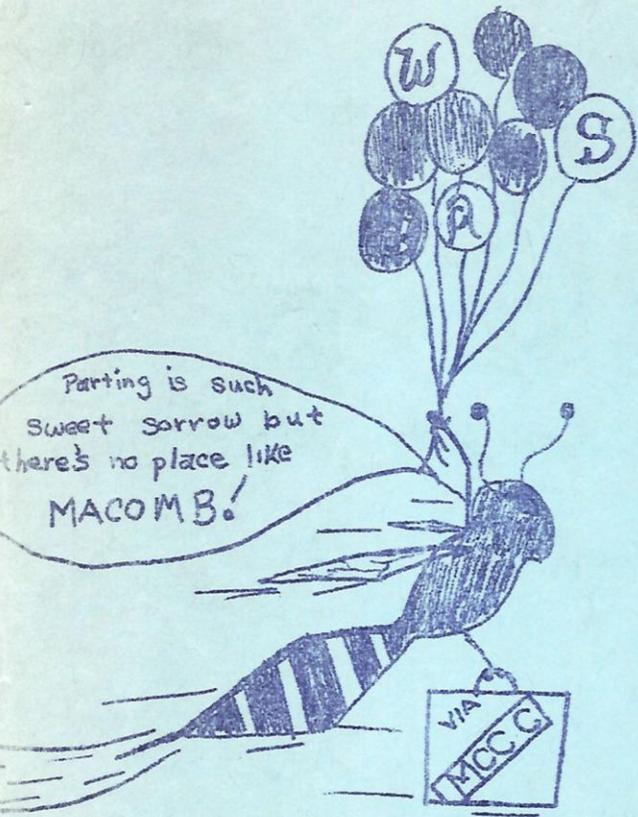
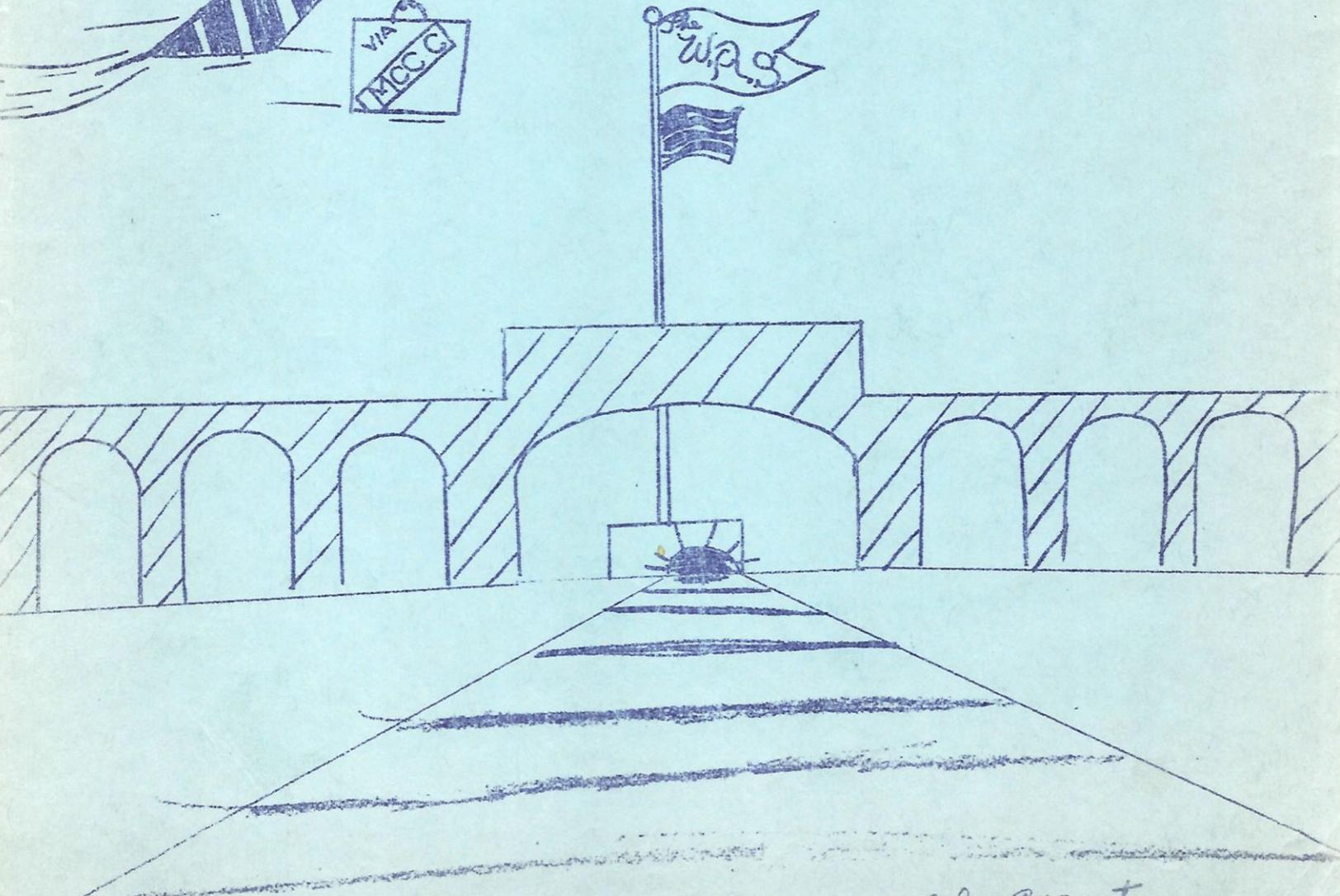


The W.A.S.P.



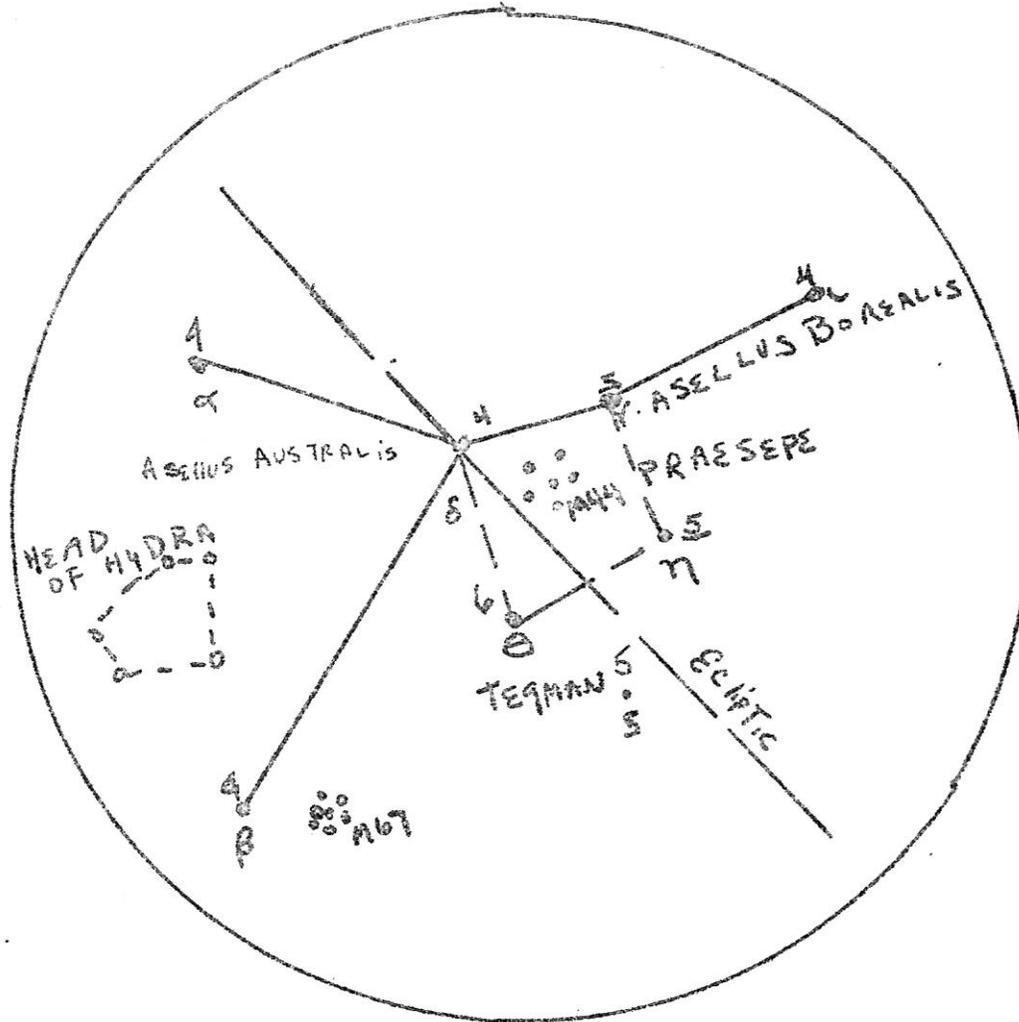
Parting is such
Sweet sorrow but
there's no place like
MACOMB!



editor:
Frank McCallough

July-August
1977

CONSTELLATION OF THE MONTH



Cancer

One learns that from Macrobius, the name "Cancer" was selected by the Chaldeans to represent the above constellation because the crab, being that it walks backward, typifies the sun's apparent retrograde movement when it is in this part of the zodiac.

The Tropic of Cancer is the circle on the earth which marks the points at which the sun at noon is overhead at the summer solstice, marking the points where the sun can be seen in the zenith.

The star cluster Praesepe, or the "Bee Hive" has quite an interesting history. For in ancient times it was regarded as a sort of barometer. Pliny thus refers to the cluster:

"If Praesepe is not visible in a clear sky, it foretells the coming of a violent storm."

Cancer achieved its place in the heavens according to the Greek legend while Hercules was engaged in his famous contest with the dreadful Lernaean monster, Juno, envious of his fame, sent a crab to attack him, but Hercules quickly dispatched it. Juno, to reward the crab for the sacrifice, persuaded Jupiter to immortalize the creature by placing it among the stars.

Locating Cancer is not so difficult as it lies between Gemini and Leo. A line drawn from β Tauri to Pollux in Gemini, prolonged about 15° , ends in Praesepe, the notable star cluster in Cancer, also known as the "Bee Hive" and the "Manger".

The Bee Hive was one of Galileo's first conquests with his telescope which amazed and delighted him. This cluster has often been mistaken for a nebula and a comet. In June of 1895, all of the planets, excepting Neptune, were in this region of the heavens, and Halley's comet appeared in Cancer in 1531.

The Bee Hive contains a total of 358 stars down to the 18th magnitude. Eighty of the stars in the cluster are brighter than the 10th magnitude, and there exist 100 which are brighter than the sun: to be exact, 20 of them are 10 times the brightness of the sun. This cluster is 500 light years away.

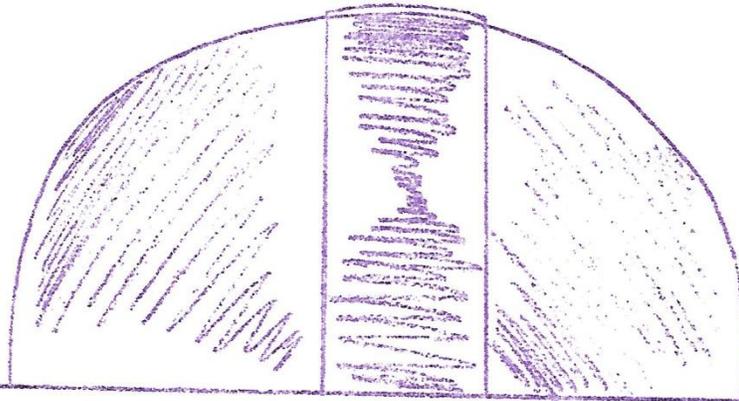
The double star Cancri is of interest. According to Professor Russell, it has two stars in orbital motion about one another, which have completed nearly three revolutions since the first observations by Herschel in 1780, the period being about 60 years.

Cancer's moon children watch from houses with all their windows open wide, wanting to be touched by everything. Endless naked moonlight swims in the green sensational sea. Throbbing with the wave-beat. Laughing the Lunar-laugh, sobbing in the dark when the moon shrinks.

Mfr

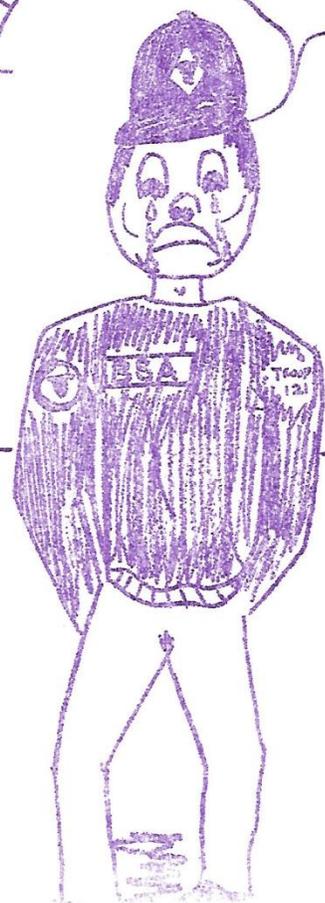
(Special thanks to Olcott's Field Book of the Skies and the Zodiac, without which this could not have been written. I still keep waiting for Orion to come up again!)

ROTARY NEWS



STAR GATE
OBSERVATORY

BUT
THEY'RE SUPPOSED
TO BE HERE
ON FRIDAY NIGHTS
AREN'T THEY?



HOLES IN SPACE

By

Kenneth Wilson

One of the objects on the list of new discoveries in astronomy are black holes. As opposites to these objects, white holes have been recently proposed. Some of the theories proposed concerning these objects sound more like science fiction than scientific astronomy.

Black holes were first proposed by J. Robert Oppenheimer and one of his graduate students, Hartland Snyder, in 1939. Black holes are the burnt out cinders left over from the deaths of massive stars. When the star has used up its atomic fuel, it begins to collapse rapidly. If the star is of sufficient mass, when it collapses, the gases of the star gather such momentum that they virtually crush themselves out of existence. According to Einstein's general theory of relativity, as the gases crush each other toward oblivion, the usual laws of physics may not apply. The star's mass becomes infinitely dense, yet occupies virtually no space. For example, a star twice as large as our sun's 864,000 mile diameter would shrink to less than the size of the state of Rhode Island, in a fraction of a second. The gravity of this black hole or "collapsar" (as cosmologist Alastair G.W. Cameron calls it) is so intense that no light or any other radiation can escape from it. Anything passing near a black hole would be drawn into it, never to be seen again. As it emits no radiation, about the only way to detect the presence of a black hole is to observe its effects on a binary companion. Cameron and Richard Stothers, both of NASA's Goddard Institute for Space Studies, believe they have found a black hole as the binary companion to Epsilon Aurigae. This "star", which eclipses its bright companion every 27 years was previously thought to be a young star in its early stages of development. Cameron and Stothers believe another possible black hole is the companion of 89 Hercules.

If, in these black holes, matter vanishes, where does it go? British theorist Roger Penrose suggests that the missing matter may pop out elsewhere in the universe. Taking up where Penrose leaves off, astrophysicist Robert M. Hjellming suggests an object the complete opposite of the black hole: the white hole. Hjellming suggests that the white hole would be the point where matter and energy would re-emerge into a universe. The flows between universes would be two-way, thus keeping equilibrium.

One of the major problems of modern astrophysics is the large amounts of energy, in the form of cosmic radiation, x-rays, and infrared radiation, coming

from quasars and the centers of galaxies (including the Milky Way). The output of these energies seems to be greater than can be accounted for by any known physical process, including thermonuclear ones. If white holes could be shown to be the origin of these radiations, a major problem of astrophysics would be solved.

If any conclusion can be drawn from the above, it is: that the more we learn about the universe, the more uncertain we are of our theories, and the more new questions there are that go unanswered. One thing is certain – astronomy is not a dead science, as has been often said.

WHEN I HEARD THE LEARN'D
ASTRONOMER

When I heard the learn'd astronomer;
When the proofs, the figure, were ranged in column before me;
When I was shown the charts and the diagrams, to add, divide, and
measure them;
When I, sitting, heard the astronomer, where he lectured with much
applause in the lecture-room,
How soon, unaccountable, I became tired and sick;
'Til rising and gliding out, I wandered off by myself,
In the mystical moist night air, and from time to time,
Look'd up in perfect silence at the stars.

-Walt Whitman

THE 1971 CONVENTION OF THE GREAT LAKES REGION

This is our last announcement for the Great Lakes regional Convention to be held on the campus of Oakland University, Rochester Michigan, on the days of August 6, 7 and 8. Food and lodging can be provided by the University for those who complete the attached form before July 30. Those who desire to camp or seek accommodations outside of the University should write the registration address for information. Regardless of your plans, it is imperative that we know before July 30 if you wish to attend the banquet. The University must know the amount of food to purchase in advance, so be sure to check the appropriate box on the attached form and enjoy a really splendid dinner.

We are most pleased and honored to have Mr. George Keene as our guest banquet speaker. He will discuss with us his experiences in building a 20 inch – f/5 telescope.

There are still openings for papers on the Saturday night agenda. Papers are limited to 20 minutes (strictly enforced) unless permission is granted in advance for exception. At least 10 minutes will be allotted at the end of each paper for discussion. An abstract of each paper must be submitted before August 3, for approval and inclusion in the convention program. Some of the papers submitted so far include an account on constructing a stellar spectroscope and infrared astronomy for the amateur.

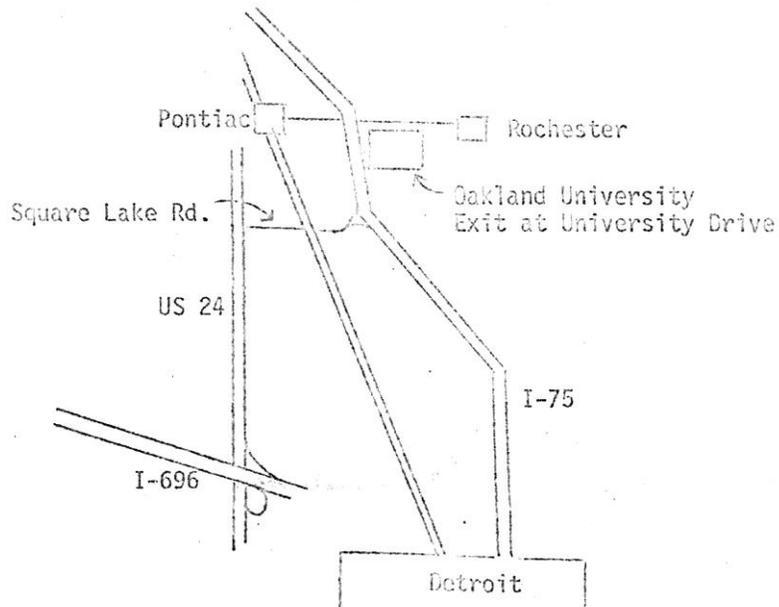
We are pleased to announce that the astronomical club with the most people attending the convention will be given a 26 inch –f/7 Astro camera. A five element lens is made by the Pacific Optical Co. and performs outstandingly.

Registration Address: Gerald Persha
1912 W. 12 Mile Road
Royal Oak, Michigan, 48073

Program summary and map on reversed side.

OUTLINED SUMMARY OF OUR PROGRAM

Friday, Aug. 6	Noon	Registration starts
	8:30 PM to 10:00 PM	Pete Fountain at the Meadow Brook Music Festival. Tickets \$2.50 and 4.50
	9:00 PM to -----	Good time hour with food and drinks. Featuring the famous D.O.A.A. slide shows
Saturday, Aug. 7	9:00 AM to 11:00 AM Lunch 1:00 PM to 4:00 PM	Papers More Papers
	6:30	Banquet
	8:30 PM	The Detroit Symphony presents <u>Fidelio</u>
	10:00 PM to -----	Star party - drinks – at the most secluded and dark place on campus
Sunday, Aug. 8	Field trips to the McMath-Hulbert Solar Observatory and the U of M Portage Lake Observatory	



MOON WATCHING

There have been observations which suggest the possibility that the moon has served as a base for unidentified spacecraft. Astronomers have noted, at different times, bright lights in the Aristarchus crater, the letter X in the Eratosthenes crater, the Greek letter gamma in the Littrow crater, and a checkered pattern in the Plato crater. Are we to conclude that these lunar craters have been frequented by extraterrestrial astronauts?

The possibility cannot be rejected, especially with regard to the Plato crater, where many mysterious lights have been observed. Such observations are most numerous during times when Mars is closest to the earth.

An American magazine claims that two "top scientists" and at least two high government officials have had personal contacts with "space people". If this were true, it would mean that extraterrestrials are watching our planet, that they visit us from time to time, and that they may already be taking a hand in our affairs. But there is no proof of such intervention, no real evidence of any kind. The claims made by flying saucer enthusiasts seem premature at best, and sometimes incoherent.

If extraterrestrials were sending us signals, establishing bases around the earth, flying over it and sometimes landing on it, all of this would indicate that they wanted to make contact with us. Why should they not do so directly and openly? Why should they make themselves known to us in such obscure and dubious ways?

How are we to explain the fact that the Russians and Americans are still using rockets whose principle was known in the time of Confucius if extraterrestrials are in contact with their governments and confide their scientific secrets to them? And the Cold War that still poisons the world makes it hard to believe that our affairs are being directed by benevolent outsiders.

Furthermore, flying saucer stories bear disturbing similarities to those of ghosts, apparitions and communication with the Beyond. At least eight thousand people are said to have reported seeing flying saucers, and many times that number have claimed to see ghosts, but no conclusive proof of the reality of either has ever been given. Belief in fantastic or supra-normal occurrences is greatly hampered by visionaries, practical jokers and mentally deranged people who confuse dreams, imagination and hallucinations with objective truth.

It has been said that they are afraid of earthlings. This seems unlikely, but we can conjecture that they may have delayed landing on our planet because its biological conditions are unfavorable to them.

With our concept of time, however, it seems inexplicable that they should have delayed for hundreds or thousands of years. But the fact that we do not know how time and duration may appear to extraterrestrials. For beings who come from a solar system many light years away, and have thus solved the problem of space and time and broken the duration barrier by contraction or

infinite elongation of time, a thousand years may be equivalent to a few seconds on earth.

The problem of the essence of time in the cosmos is so far beyond what we can perceive that we cannot even evaluate time with our arbitrary measurements. In other words, the explanation of UFOs is probably incompatible with the data of our experimental science.

But it is not impossible to imagine other explanations.

The most fantastic one is that extraterrestrials are already among us and that we see them without recognizing them.

Their victory over space and time presupposes a science that we can only vaguely imagine. It may include the secret of traveling in time by disintegration and reintegration. They could then reintegrate themselves by substitution; that is, they could inhabit an earthly body without altering its external appearance.

This is, of course, highly speculative theory, but it is less farfetched than the view that extraterrestrials have minds and personalities like our own.

Primitive spacecraft

The problem of flying saucers leads us to examine our own spacecraft.

It is incredible that the American and Soviet governments should have wasted so much time and money on rockets basically the same as those that were launched in the time of Confucius. In the scale of the cosmos, the speed and range of rockets have increased relatively little in the past twenty-five centuries.

There will be no real progress toward cosmic travel until serious efforts are made to develop spacecraft that have nothing in common with the ancient rocket.

True cosmic travel involves distances of thousands, even millions of light-years. From this we can conclude that our experimental science will have to become a supra-normal science, perhaps overlapping to some extent with the science that has been anticipated by occultists.

(Reprinted from One Hundred Thousand Years of Man's Unknown History by Robert Charroux)

ER

ASTRO ALMANAC

by

Kenneth Wilson

AUGUST

AUG.

- 6 Full moon at 19:42 U.T.
- 6,7,8 Great Lakes Regional Convention
- 9 Lunar perigee at 1^h U.T.
- 10 Opposition of Mars
- 10-14 Perseids Meteor shower (Max.-12) radiant- 3^h 08^m, -58°
- 10-20 Cygnids Meteor shower (Max.-18) radiant- 19^h 20^m, -52°
- 11 Mercury stationary, Mars at closest approach to earth (34,900,000 mi.)
- 13 Last quarter moon at 10:55 U.T.
- 19 Warren Astronomical Society general meeting at Macomb County
Community College
- 20 New moon at 10:53 U.T.
- 21-23 Draconid meteor shower radiant- 19^h 24^m, -60°
- 21-31 Draconid meteor shower radiant- 17^h 26^m, -63°
- 24 Lunar apogee
- 26 Inferior conjunction of Mercury
- 27 Superior conjunction of Venus
- 28 First Quarter moon 14^h 56^m, U.T.

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