

# THE WASP

august 1972

THIS MONTH'S COVER: by Ken Wilson. Pictured is M13 the famous globular cluster in Hercules. M13 or NGC 6205 is well known to the amateur astronomer, being one of the most spectacular sights for the small telescope in the Northern Hemisphere. Its total brightness is about that of a 6<sup>th</sup> magnitude star. Photographically, it has been measured to a diameter of over 23', which at the cosmologically near distance of 25,000 light years, corresponds to a diameter of 170 light years. The cluster was discovered by the English astronomer Edmund Halley in 1714 and is thought to contain several hundred thousand stars. The density of the central part of the cluster is estimated to be one or two stars per cubic light year! In the vicinity of our sun, the density is only about one or two per 500 cubic light years.

The Warren Astronomical Society Paper (W.A.S.P.) is published by the Warren Astronomical Society monthly as a privilege of membership. Advertisements herewith in are free to members of the W.A.S. Non-member subscriptions and advertisements are available to others upon arrangement with the editors. Your contributions, literary and otherwise are always welcomed.

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The W.A.S. holds correspondence (sometimes intermittently) with the following organizations. Others are encouraged to join this list:

THE ASTRONOMICAL LEAGUE  
THE DETROIT ASTRONOMICAL SOCIETY  
THE DETROIT OBSERVATIONAL AND ASTRONOMICAL ASSOCIATION  
THE JACKSON ASTRONOMICAL SOCIETY (MISSISSIPPI)  
THE KALAMAZOO ASTRONOMICAL SOCIETY  
THE MIAMI VALLEY ASTRONOMICAL SOCIETY  
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#### BITS AND PIECES

Congratulations are in order for President Frank McCullough and club secretary Diane Bargiel who were married July 1<sup>st</sup> and are now Frank and Diane McCullough. If we could only get as many WAS members to come to meetings as showed up for the wedding. Maybe it was because Frank wasn't showing any slides? Anyway, good luck Frank & Diane.

Congratulations also to ex-president Martin Butly, where ever you are, who got married several days before Frank and Diane.

Thanks go out to Mr. Justin Weaver who read the above line about contributions to the W.A.S.P. He sent \$5.00 to the W.A.S.P. He has been reading copies that have been mailed to him and now, like it or not, he'll keep on getting them.

Thanks also to Mr. Alyea who is fixing up the dome rollers for Stargate which sometimes roll. Good luck Mr. Alyea, you'll need it.

Fair warning to all W.A.S. members: Over the next few months you will be seeing eclipse slides until they come out of your eyes. Particular people to avoid are Tim Skonieczny and several members of the K.A.S., i.e., Mike Potter, Bob Ross, etc.

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The characters in this paper are fictitious. Any similarity between them and any persons living or dead is purely coincidental. The Surgeon General also warns that reading this paper may be hazardous to your health.

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# Messier Contest

Date  
August 4th

Time  
8:00 P.M.

at  
CAMP ROTARY

M-56	GLOBULAR	LYRA	8th mag.
M-30	GLOBULAR	CAPRICORN	8th mag.
M-80	GLOBULAR	SCORPIUS	7th mag.
M-107	GLOBULAR	OPHIUCHUS	9th mag.
M-17	DIFFUSE	SAGITTARIUS	5-6th mag.
M-71	GLOBULAR	SAGITTA	9th mag.

## Winners of LAST Messier Contest

- ① Mike Potter Team #1 KALAMAZOO
- ② Bob Ross Team #2 KALAMAZOO
- ③ Ken Wilson ALONE WARREN



WALTER ROUNDEBUSH ?????? — DARK HORSE

**PRIZES**  
1st 2nd 3rd  
PLACES

GOOD Luck Everyone!!

## ECLIPSE 1972

### A W.A.S.—K.A.S. trip to Cap Chat

Our eclipse expedition started out at approximately 6:30 a.m. on July 6<sup>th</sup> and consisted of three cars and a VW bus, two cars belonging to the Warren Astronomical Society, one car and the VW bus belonging to members of the Kalamazoo Astronomical Society. We crossed the border early that morning with little difficulty from the border inspectors. This was the start of our twenty four hour venture to Cap Chat on the Gaspé Peninsula.

That morning I did the driving while my wife took a snooze in the back of the car. I must say that I felt lousy since I had only two hours sleep before the trip. Everything went well till we stopped at a gas station for fuel. The man told me I needed a new fan belt when he looked under my hood and I was quite agreeable to this. He told me to pull it into the garage. So what did I do? I pulled it into the garage! I pulled it in and dislocated my exhaust system all over his floor, as he and I hadn't paid any attention to the lift lying in the middle of his floor. He fixed that for a buck and we were on our way seeing little of Toronto, Montreal, and Quebec.

After Quebec, we ran into some messy road made of dirt and gravel. Once when I was trying to sleep, I felt a smooth ride turn into a nightmare--so I thought. The smooth ride suddenly ended in a large THUMP-THUMP-CRACKLE--SLIDE. All I could do was put my pillow over my head and wait for the final crash. This same noise continued for quite a while and I realized that I wasn't going to die after all (at least, not right away). Diane was still driving, and I trusted her as far as my nose when it came to driving. I asked Diane what was going on up there. She replied, "The road just ended, but everything is alright." Half in a daze, I said, "O.K." Around one o'clock Friday morning, we pulled off for coffee and gas and I took over driving on some of the most treacherous road I have experienced for a long time.

During the morning a bright aurora was flapping through the sky. At times I let Diane drive the car from the passenger side while I stuck my head out of the window to watch this amazing phenomenon. Driving this way was great till I heard the churning of gravel awakening me to the fact that we had briefly, if not permanently, left the road. I continued to do the driving myself, following Ken Wilson into the twilight hours. I felt sorry for poor Ken as he valiantly fought sleep while trying to drive all the way to Cap Chat without anyone relieving him. He nearly made me sea sick as I watched him leave tire prints on both sides of the soft shoulders that morning. Thank God for sunrise! As we made our way into Cap Chat, Ken came to and we all stopped to take pictures of sunrise over the St. Lawrence Seaway.

We then drove the deserted streets of Cap Chat. We were all hungry and wanted a place to eat (so all of us started eating this big red building) ---- just thought I'd throw that in there for kicks. Anyhow we searched fruitlessly for a place, but nothing was open. Why not?!? It was 5:15 in the morning; you would think something would be open .... Or would you?

Mike Potter passed out in the parking lot along with his crew from the U.S.S. Enterprise (the name given his car). After arousing Captain Mike, they ventured out into the voids of space where he and his crew proceeded on a collision course with a manhole. His deflector shields failed him as he destroyed the Cap Chatean manhole the townspeople had painfully worked on. A rescue party of four ventured outside the mothership for a rescue mission.

The ship was finally lifted off the large steel structure, revealing one of the mysteries of space .... A Black Hole!!

That day we all settled down up in a hill a half mile from the center line of totality. Along with our eleven-man scientific team, a crew from Wisconsin set up with us. Don Mission from the W.A.S. joined us later on in the week. Mr. Kwentus and his family were seven miles from us in a town called Ste. Anne des Monts. He made one mistake; he stayed in a motel ... and in a motel is a shower. Thanks for the shower Mr. Kwentus from me and all who used it!

Roger Civic and family stayed in a camping area just down the road from Mr. Kwentus. This made a total of 16 people from Warren in the Cap Chat area. Others were on Prince Edward Island or a little north of there. One guy rode up on an English racer all the way from Birmingham, Michigan. He made it in two weeks, arriving one day before the eclipse.

Our whole camp site played baseball each day in the high grass, but when we left we had made ourselves a very nice baseball diamond. We literally leveled the whole area! We also played with Frisbees, and did some fishing in the St. Lawrence. Paul Helfenstein filleted all the fish caught and boy did he smell. I never saw so many people avoid a person in my life.

The only other problem we seemed to have was speaking French. I felt like an illiterate savage trying to communicate with the townspeople. I felt like a real goofball rubbing my stomach to show them we needed a place to eat, and showing I was thirsty by pretending I was drinking. I'm sure glad I didn't have to show them I was tired! Two nights before the eclipse, Mike Potter and Bob Ross from the K.A.S. and myself were looking for meteors in a very superb night sky. Our eyes were thoroughly dark-adapted and we could probably see meteors of fifth or sixth magnitude if we had to. Little did we know Ken Wilson was up to his tricks. Someone had just hollered, "meteor!" It was recorded and we settled down to watch once again. Then we heard someone holler, "BOLIDE!!" A gigantic burst of light pierced our eyes sending moans and groans from the meteor observers. We had been strobed. (You'll get yours, Ken!).

Let us go on to eclipse day, July 10, 1972. That morning I retired at 2:45 a.m. only to be aroused to a voice saying, "It looks like no eclipse today." I looked up through the tent and sure enough there was no sun. It was always present the other mornings when I awoke. I quickly scurried out the door and looked around; then it came to me -- it was so early in the morning that the sun had not quite made it over the mountain. This meant it was around 7:00 in the morning and I was so nervous now that there would be no way of getting back to sleep.

All that day we tried to find things to do, playing Frisbee, eating; and Mike Potter made his daily trips to find out the weather from the weather bureau. All looked rosy when he came back, the weather would be clear at eclipse time! By noon, however, we had gone from a nice day to a hazy overcast one. Not a breath of wind crossed our campsite and this was the reason the clouds were pouring in from the southwest.

By first contact the clouds were looking pretty mean. I was shooting prime focus through my six-inch Newtonian. Using the perfectly clear eclipse in 1970 as my practice lesson, I used a perfectly cloudy eclipse in '72 to use all the instruments and camera adapters on.

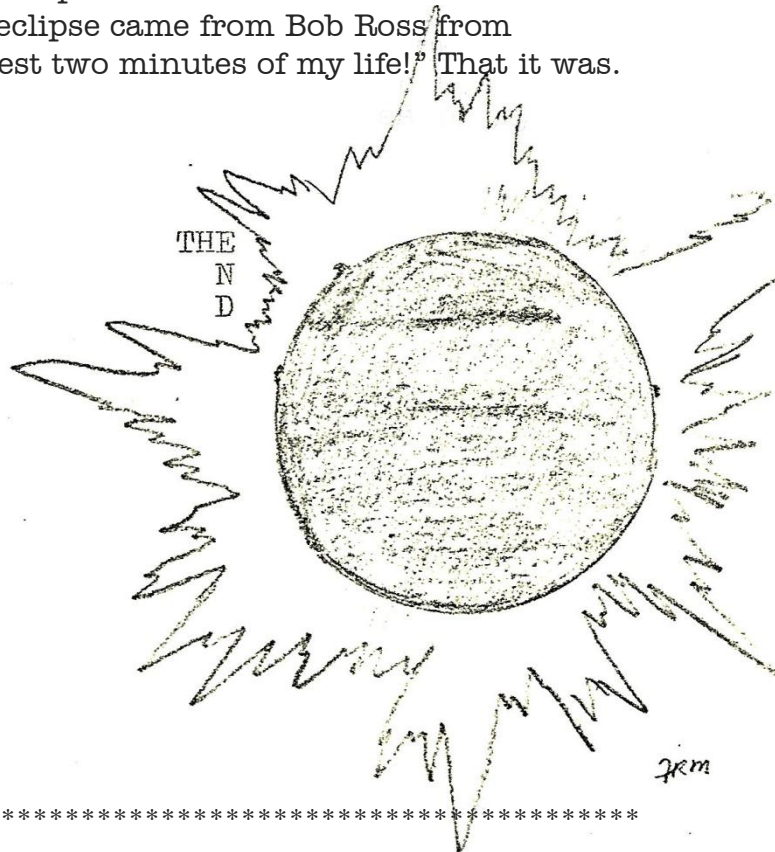
First contact finally took a bite out of the sun and the eclipse was on its way, needless to say, so were the clouds. We watched one of the major sunspots be gobbled up by the moon and the rest of the hour flew by. Then with eight minutes left before

totality a solid bank of grey clouds engulfed us. It was only a matter of time to find out if we would see a glimpse of totality or watch the whole scene under the thickness of nature's dark blanket.

I wanted to see it very badly; I'd be a liar if I said different. But there were so many who traveled so far and got so wound up for this event. I had seen one, but people like Chris Edsall who went to Perry, Florida only to be clouded out ... The gang from Kalamazoo who went to Georgia only to have the same thing happen to them as was happening here ... To look over and see Diane cursing the clouds and cheering on darkness with our whole group, nearly on the verge of tears and not even knowing what one really looks like ... Don Mission drove all that distance alone, and our friends from Wisconsin with all that equipment! These are the people three quarters of your heart aches for. What a rotten trick if there was no eclipse.

Then suddenly with no sign of a break, the crescent sun broke through, allowing all of us to get it in our instruments. Mike Potter had retired to the cliff to see the shadow cone come across the water, when he came back screaming, "We're going to see that 'mutha'!" (a slang he uses once and a while). Well we lost the crescent once again and watched darkness fall over us, then someone hollered, "There it is!" And there it was!! More beautiful than any other natural sight to this astronomer's eyes. I could see the corona around and quickly looked to the scope where I saw the corona whirling around like a pinwheel. This was probably due to the movement of the clouds since no one else seemed to have seen this. The eclipse whizzed by as fast as my knees were knocking and after seeing prominences and reappearance, it was all over and a cheer went up all around the hillside. The best quote I've ever heard from anyone about an eclipse came from Bob Ross from Kalamazoo, when he said, "That was the fastest two minutes of my life!" That it was.

By: Frank McCullough



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Constellation of the Month and Observational Astronomy

Will return  
Next month

Guide to "A Messier Album" by John Mallas & Everd Krimer  
compiled by D.T. Ther

<u>Messier # / Issue of "S&amp;T"</u>		<u>Messier # / Issue of "S&amp;T"</u>	
1	Nov. 1968	56	Aug. 1969
2	Oct. 1969	57	Aug. 1969
3	Jun. 1967	58	Apr. 1970
4	Jun. 1969	59	Apr. 1970
5	Jun. 1970	60	Apr. 1970
6	Jul. 1969	61	Apr. 1969
7	Jun. 1969	62	Jul. 1969
8	Jul. 1967	63	Feb. 1969
9	Jun. 1970	64	Jun. 1967
10	Aug. 1968	65	Mar. 1969
11	Aug. 1970	66	Mar. 1969
12	Aug. 1968	67	Jan. 1969
13	Jun. 1968	68	May 1969
14	Aug. 1968	69	Aug. 1967
15	Oct. 1969	70	Aug. 1967
16	Jul. 1970	71	Sept. 1968
17	Jul. 1970	72	Sept. 1967
18	Jul. 1968	73	Sept. 1967
19	Jul. 1969	74	Dec. 1967
20	Jul. 1967	75	Sept. 1970
21	Jul. 1967	76	Oct. 1968
22	Aug. 1970	77	Dec. 1967
23	Jul. 1967	78	Jan. 1970
24	Jul. 1968	79	Dec. 1969
25	Jul. 1968	80	Jun. 1969
26	Aug. 1968	81	May 1967
27	Sept. 1968	82	May 1967
28	Aug. 1970	83	May 1969
29	Sept. 1969	84	May 1968
30	Sept. 1967	85	Apr. 1968
31	Oct. 1967	86	May 1968
32	Oct. 1967	87	May 1968
33	Dec. 1967	88	May 1970
34	Oct. 1968	89	May 1970
35	Nov. 1968	90	May 1970
36	Nov. 1967	91	May 1970
37	Nov. 1967	92	Jun. 1968
38	Nov. 1967	93	Feb. 1968
39	Sept. 1969	94	Feb. 1968
40	Mar. 1970	95	Mar. 1968
41	Dec. 1969	96	Mar. 1968
42	Jan. 1970	97	Jan. 1968
43	Jan. 1970	98	Apr. 1968
44	Jan. 1969	99	Apr. 1968
45	Dec. 1968	100	Apr. 1968
46	Feb. 1968	101	Mar. 1969
47	Feb. 1968	102	
48	Feb. 1970	103	Nov. 1969
49	Apr. 1969	104	Apr. 1969
50	Feb. 1970	105	Mar. 1968
51	Mar. 1969	106	Mar. 1970
52	Nov. 1969	107	Jun. 1970
53	Jun. 1967	108	Jan. 1968
54	Aug. 1967	109	Mar. 1970
55	Sept. 1970	110	Sept. 1970

-completed by ken wilson

ASTRO-ALMANAC

By  
Ken Wilson

MOONS OF		
AUG. /	JUPITER <sup>1</sup> /	EVENT
1	02413	
2	14023	Last Quarter Moon at 3 <sup>h</sup> 02 <sup>m</sup>
3	42301	Lunar Perigee (229,500 mi.).
4	43210	Moon at 5°N. of Saturn
5	4302D	Moon at 7°N. of Venus
6	4301D	
7	42103	Venus at greatest hel. lat. S, Mercury at inferior conjunction at 15hrs., Twilight begins: 2:50-ends: 21:19 L.M.T.
8	40213	Mercury at greatest S. hel.lat.
9	41023	New Moon at Ohrs. 26mins.
10	23041	Beginning of Perseids (thru 14 <sup>th</sup> , max. 11 <sup>th</sup> ) radiant: 030858 this is a major shower with very fast meteors. Beginning of $\chi$ Cygnids (thru 20 <sup>th</sup> max. 19 <sup>th</sup> ) radiant: 192052 bright meteors of average speeds
11	32104	
12	30124	
13	3024#	Moon 6°S. of Uranus
14	21034	Neptune stationary
15	0134#	Mercury at 085014 05, Venus at 063019 20 (Mag. -4.3), Mars at 101012 32, Jupiter at 175423 22 (Mag. -2.1), Saturn at 051121 24 (Mag. +0.4), Uranus at 125805 30, Neptune at 160319 03
16	10234	Lunar apogee (251,200mi.) at 10hrs., First Quarter at 20hrs. 09mins.
17	23014	Mars at Aphelion, Mercury stationary at 2hrs., Moon 6°S. of Neptune at 15hrs., Twilight begins: 3:09-ends: 20:56 L.M.T.
18	32104	Moon 0.8°N. of Antares at 2hrs.
19	34012	Moon 2°S. of Jupiter at 17hrs.
20	43102	
21	42103	Beginning of $\theta$ Draconids (thru 23 <sup>rd</sup> ) radiant: 192460 very slow minor shower. Beginning of $\zeta$ Draconids (thru 31 <sup>st</sup> ) radiant: 172863 slow, bright.
22	4013#	
23	41023	
24	42031	Full Moon at 13hrs. 22mins.
25	43210	Jupiter stationary at 3hrs., Mercury at greatest W. elong. (18°) at 10hrs.
26	34012	Venus at greatest W. elong. (46°)
27	3102#	Twilight begins: 3:27-ends: 20:33 L.M.T.
28	2034D	Lunar Perigee (228,550 mi.) at 15hrs.
29	20134	
30	10234	
31	20314	Last Quarter Moon at 7hrs. 48mins.

(All the above listed times, are in 24 hour E.S.T., unless otherwise noted.)

<sup>1</sup>"O" represents the disc of Jupiter, "D" means the moon is on Jupiter's disc, # means the moon is in shadow or behind the disc. The configurations are for the inverting telescope at 5h E.S.T.

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ASTROPHOTOGRAPHERS

Save time and film. Twenty-page booklet (8½ by 11 in.) contains exposure data for the sun, moon and planets, and has a recently expanded eclipse section. Fifteen exposure guides list shutter speeds for all films (4 to 2000 ASA) and f ratios (1.4 to 256.0). Includes instructions for first focus, afocal, negative and positive projection telescope photography. Send \$2.00 to Larry F. Kalinowski, 15674 Flanagan Ave., Roseville, Mich. 48066. Phone (313)-776-9720. SPECIAL OFFER: \$1.00 off regular price of \$2.00 for all Warren Astronomical Society Members.