

The Spectrum

Buffalo Astronomical
Association, Inc.

Darwin Christy, Editor

SEPTEMBER meeting: The September 11th meeting will begin at a new time - 7:30 PM - in the New Science Building at Buffalo State on Elmwood Ave. Our speakers will be B. A. A. members. Their topics will include the Summer Star Parties, Summer Observations, Stellafane, the Mees Observatory, and various member's Astrological Experiences.....

* * * * *

** SEPTEMBER - OCTOBER **
** 1981 **

OCTOBER meeting:- The October 9th meeting will begin at 7:30 PM in the New Science Building at Buffalo State on Elmwood Ave. Our guest speaker will be Orrin Christy. His topic will be, "Mapping Our Galaxy Using the Hertzsprung - Russell (H-R) Diagram."

* * * * *

'The Comet' is from "Sorry About That" collection
Esther L. Goetz

* * * * *

From the President

Welcome to the 1981-82 season of the BAA. I hope you have had a restful summer and I trust we will all have a productive season.

Our June Business meeting included an election of three Board Members. Two of them, Bob Mayer and Roland Rupp, are continuing their service on our Board; the third position was won by Carl Milazzo. Also, Edith Geiger was elected as Treasurer. In addition, Adrienne Kimble is taking over as membership chairperson. I wish to thank Darwin Christy and Joe Provato for their service to the BAA and congratulate Bob, Roland, Carl, Edith and Adrienne.

I hope you all have had a chance to attend the various star parties some of our members hosted. I thoroughly enjoyed each one I attended. Miro's picnic was a special event we'll all remember for many years. Thanks are in order for Tom Dessert, Miro Catapovic, Ernts Both, Larry Carlino, Sleva Desmond, Ken Biggie, Larry Hazel, and of course, Carl Milazzo for scheduling the parties and arranging the visit to the Mees Observatory. (You all missed a spectacular view at Larry Carlino's. I know it looked like rain just before sunset but actually we observed till 1:30 with his 18" Dobsonian. It was unbelievable!)

The highlight of my summer, astronomically speaking, was my first visit to Stellafane. I can assure you, it won't be my last! I'd like to tell you a little bit about this unique event.

Stellafane is people - amateur astronomy - sharing their love for their hobby with people from all around the world. 1000 people - hundreds camping in pastures below the club house - talking astronomy. We shared a 22" Dobsonian with a unique trailer mounted, f:7 focal length, a spectacular Aurora slide show and an equally amazing super 8 film of an all night Aurora. We heard about the Problemican and saw a breath taking film of the African Eclipse, with Mt. Helena thrown in for good measure. I made two new friends, learned the incredible history of the Springfield Club, and climbed a 15 foot ladder to see the dust lane in Andromeda. We received information about the amateur space telescope and heard about the NASA Space Telescope. We examined beautiful home crafted telescopes with many innovative designs.

H. RUDOLF BUECKING

1902 - 1981

Age 79, formerly from 149 Greenfield Street, Buffalo, New York, passed away July 5, 1981 at Santa Monica, California. "RUDY" (as he was known) was one of the last original members of the BAA and the Telescope makers. He will be missed by the many members who remember him as a telescope maker, especially those whom he showed the art. Memorials may be made to the Buffalo Astronomical Association in the donor's name.

* * * * *

??? QUIZ ???

- 1) What is a BOLOMETER?
- 2) What is an AEROLITE?
- 3) Before the telescope was invented, what instrument was used to find apparent star positions?
- 4) What are SIDERITES?
- 5) How would the theoretical WHITE HOLE form?
- 6) Starting with the photosphere (bright disk) of the SUN, what are the layers called?
- 7) What are (a) FACULAE? (b) FLOCCULI?

* * * * *

A few dots here & a few dots there formed the following constellations:-

CASSIOPEIA - CORONA BOREALIS - GEMINI - LYRA -
URSA MAJOR out of the last 'SPECTRUM'.

* * * * *

On Halley's Comet

Halley's Comet is due to arrive
around about 1985

Man has always been intrigued
by meteorites

but Halley's Comet is the sight of sights.

If I'm still alive my only hope
is that I see in my telescope
not a dragon with flashing tail
but a lovely princess
wrapped in a veil !

I sat on a rock for a half an hour and talked with Walter Scott Houston about M-13. We all saw meteors and M objects a plenty. Above all else, we felt the spirit of trust and co-operation that astronomers around the world have for their fellow astronomers. Stellafane is an experience I'll never forget as long as I live.

P.S. - Ask me about the world's largest relief map and Walden Pond.

Al Kolodziejczak

* * * * *

----- IDEAS NEVER WORK UNLESS YOU DO -----

* * * * *

The next "SPECTRUM" deadline is October 23rd. Again I am asking for articles no matter how small or LARGE!

* * * * *

DUES DUES DUES DUES DUES DUES

DUES are due.....Please see Adrienne Kimble and she will gladly accept them from you.

Students and Senior Members - \$ 5.00

Individual membership - \$ 10.00

Family Membership - \$ 15.00

* * * * *

Spy and Tell

Congratulations to Orrin Christy and his partner, Michael Lance, for finishing second overall, and first in the two-man category in the grueling 320 mile Cross State Canoe Classic starting from Niawanda Park in Tonawanda and ending in Albany. Ironically, the first place winner, Arthur Hasky, from England, won with a kayak which he borrowed from Orrin, one which Orrin had made. Orrin and Michael finished in 56 hours, 58 minutes, and Hasky in 52 hours, 37 minutes. Approximately 40 people in 22 boats started out on June 28th on this exhausting marathon on the New York State Barge Canal, with about half paddling to the finish on July 4th.

Orrin and Michael, friends since second grade, built this two-man kayak which represented about 250 hours of work. It is made with strips of cedar glued together with a special epoxy. It weighs 64 pounds and is 21 feet long and 22 inches wide, and it is quite a squeeze for Orrin who is 6 feet, 5 inches tall.

This race is held for the benefit of the American Heart Association, and the team of Christy and Lance earned \$1,100 for the association from contributions from supporters for each mile completed. A job well-done by two extraordinary men.

Darwin Christy, who was the 'pitcrew' for Orrin and Michael, was a major factor in the victorious finish of the two young men. Darwin met them every five to seven miles along the entire course extending food and water by a pole with a homemade shelf. Besides this nourishment, a quart of fluid was hooked to their mouths by a tube, and they carried a banana if needed. Orrin and Michael paddled continually with neither of them stopping, going from 45 to 50 miles for eight hours each day.

For those of you who unfortunately missed out wonderful B.A.A. picnic at the Catapovic's on Grand Island, some unscheduled entertainment took place when some members, including Al K. and Gene Witkowski, decided to try out Orrin's one seat kayak. It seems it is extremely difficult to keep one's balance so the turn over was great with many flip-flops providing exuberant guffaws from onlookers. Most members were treated to less perilous water events in Catapovic's beautiful

motor launch in cruises on the river.

Irv and Esther Goetz have a new orange colored gazebo which they have been enjoying all summer. They have named it the 'Orange Crate'.

Carl Milazzo, Phil Cizdziel and Shaun Hardy went on a fossil hunting jaunt to Batavia with Walt Whyman as their guide to the site. Seems that Carl and Phil re-named the specimens they found according to things which they resembled. Perhaps the scientific community should be notified of the change.

Ed Huck has had an exciting summer as outfielder on the Java A baseball team.

Congratulations to Lorne Moore on becoming a grandfather with the birth of baby Alice to son, Greg, and daughter-in-law, Judy, of Detroit.

We're happy to report that Walt Whyman's eye is improving after a troublesome ailment last winter, and he no longer needs to wear an eye-patch.

Dan Collins, a student at Buff State with a major in physics and a minor in astronomy, does a great deal of solar work in their new observatory making diagrams, counting sunspots, and taking pictures with a solar filter which would be like an f:44 telephoto. He also helps to set up programs in the Planetarium and is working with new sound equipment. He is now engrossed in a book on Einstein's Special Theory of Relativity.

Allen Gross, sister Karen, and their Mon spent many delightful weekends during the summer in Allen's sailboat which docks at Dodus Bay near Rochester.

Carroll Geiger conducted two symphony band concerts this summer, one at Beaver Island and the other at Cheektowaga Town Park.

Speaking of thievery abroad in the land, prompted a memorable remark from Ken Biggie's astute insight:- "It wouldn't be so bad if burglars were only decent people."

Edith L. Geiger

* * * * *

Astronomical Happenings.....

LUNAR PHASES

September 6th - First Quarter Moon

September 13th - Full Moon (Harvest Moon)

September 20th - Last Quarter Moon

September 28th - New Moon

October 6th - First Quarter Moon

October 13th - Full Moon (Hunters Moon)

October 19th - Last Quarter Moon

October 27th - New Moon

November 4th - First Quarter Moon

SUN'S PATH

September 22, 1981 at 10:05 PM EST the Sun will cross the Equator resulting in the Autumnal Equinox. Fall begins.

NEPTUNE was discovered on September 23rd in 1846

CONJUNCTIONS of the PLANETS

September 6th @ 14:06 - Venus & Pluto

September 9th @ 08:19 - Mercury & Saturn

September 12th @ 14:48 - Mercury & Jupiter

September 20th @ 03:42 - Mercury & Pluto

October 6th @ 19:21 - Venus & Uranus

October 18th @ 18:58 - Mercury & Pluto

October 20th @ 14:59 - Mercury & Jupiter

October 29th @ 14:29 - Venus & Neptune

METEORS

September 1st - Beta Lacertids

September 11th - Epsilon Perseids

September 22nd - Alpha Aurigids

October 2nd - Quadrantids
 October 9th - Draconids
 October 17th - Epsilon Areitids
 October 21st - Orionids
 October 24th - Leo Minorids
 November 3rd - Taurids (Southern)
 November 9th - Cepheids (New)
 November 10th - Taurids (Northern)

* * * * *

Jupiter

Moving outward beyond the orbit of Mars, past the asteroid belt, to a region of space distant enough from the Sun so that its shrunken disc sends little warmth, we find the realm of the 'Gas Giants'. Only at great distances from the Sun can these majestic planets exist. To be closer to the Sun would warm their masses, giving their gas molecules enough energy and velocity to escape the enormous gravitational pull of the planet and eventually stripping the planet to its solid core.

The first gas planet encountered is Jupiter, with its awesome hulk that contains almost twice the mass of all the other eight planets combined. Its chief constituents are hydrogen and helium in similar proportions as found in the Sun. Some heavier elements may be concentrated in small amounts in an iron-silicate core of about 10 to 20 Earth masses.

Calculations and tracking has shown that the bulk of the body of Jupiter is in liquid form due to its extreme internal pressures and temperatures. The complex atmosphere above the liquid hydrogen is responsible for all the visible surface features. Variations in the atmospheric rotational velocities, with the equatorial region rotating faster than the regions to the north and south, along with strong convection currents between the warmer interior and the cooler atmosphere produces the banded effect.

At a distance of 483 million miles from the Sun, Jupiter takes 12 Earth years to circumnavigate its orbit. It contains 318.4 times the mass of the Earth in its voluminous 142,796 Km. diameter. It possesses an albedo of .73 and its magnitude ranges from -1.4 to -2.5.

Just for fun, if Jupiter could exist in the orbit of Mars, it would produce a visible disc 6 minutes, 15.9 seconds of arc in diameter, approximately 1/5th the apparent diameter of the Moon. Jupiter's Gallilean moons would be naked eye objects and the orbit of its outermost moon, 'Sinope', would stretch almost 1/3rd of the way back to the Earth.

James A. Machowski

* * * * *

Perfect attendance for the past year according to the sign-in chart were:

Al Kolodziejczak
 Ken Kimble
 Darwin Christy
 James Machowski
 Anita Kirst
 Edith Geiger

What meetings we would have if 100% of the members attended all of the meetings. How about making that our goal this season, or even 75% attendance?????????????

* * * * *

Did you know?? All of the planets lined up or were in conjunction on September 16, 1186???

* * * * *

ROBERT E. SCHNEIDER

The early years in Bob Schneider's life were spent in his birthplace of Elmira, N. Y. He had

finished his sophomore year at Southside High when a serious accident to his grandfather, and family problems, forced him to quit school and go to work. In high school he enjoyed the drafting course and always received top marks in the subject.

For two years he went to work in the warehouse of the Artistic Card Company, and found time to study TV and radio repair at night school. His next employment was with Remington Rand where his father worked on ovens for heat treating. At that time the plant in Elmira was the biggest Remington Rand in the world, employing 8000 workers, but that plant has since gone out of business. While there, Bob worked in maintenance and made racks for plating and heat treating.

At twenty-one, he decided to leave Elmira and scout around the country to try his hand at various jobs, but finally decided to come to Buffalo where his mother lived. He found work at Feddre's Corporation, building air conditioners and car radiators, and tried many other jobs over a ten year period. He then returned to Elmira at the invitation of his cousin, who managed a 7Up company, to do vending repairs and maintenance for one year, after which he came back to Buffalo to work in the same capacity at the 7Up plant here, where he has now been employed for thirteen years.

When Bob was fifteen or sixteen years old he studied piano for a year or so and learned to enjoy the classics. He has a large record collection with his favorite composers being Prokofiev, Rachmaninov, Ravel, Debussy, Beethoven and Brahms. On coming to Buffalo he took a few lessons on guitar and banjo, and with these instruments a new musical experience opened up to him. The recordings of Earl Scruggs and Pete Seeger had a great appeal for Bob, and he began to attend bluegrass festivals in the south where he could 'jam' along. It was there that he met Kenny Bennett, a 'fiddle' player, whom he was to meet again at a party in the southern tier at the time of the Southern Tier Bluegrass Festival. After conversing on their mutual musical interest, Bob was introduced to the Border City Bluegrass Band and he has now been a member for six years. The group has a rather heavy schedule playing outdoor sit-down concerts to enthusiastic audiences in the area and in Canada. They also play for fund raising projects and various charities, and have appeared on Educational TV in Erie, Penna. Along with bluegrass the group performs numerous gospel numbers. On July 31, August 1-2, the band will be in Warren, Ohio, for a bluegrass get-together for groups from around the country, including the "Country Gentlemen" from Washington, D. C., Bill Moore from Nashville, and the Lewis Family from Virginia, to name a few. The Border City Bluegrass T-shirts sell like 'hot cakes', and the band expects that the cutting of a record in the near future will be a successful venture.

Besides the banjo and guitar, Bob plays some dobro (a guitar with a circular metal resonator on the belly and an internal tone chamber), and some string bass. He gives occasional banjo lessons at home and has a small repair shop for banjos and guitars, basically acoustic, but some electric. He is kept busy with numerous customers. The Canadian Bluegrass Review magazine for April/May had a fine article on Border City with coverage on each of the six members, and a picture of the band on the cover. In the section of the write-up devoted to Bob, the opening sentence states that he "plays an incredible banjo with the group."

A special three months project has been the rebuilding of the pneumatics and bellows of a 1913 player piano. He has to replace some bass strings and re-finish the case before this undertaking is completed.

After World War II, Bob's father brought back some binoculars from Germany, which aroused Bob's interest

in optics. He purchased a 3" mirror from their local optical company and made a telescope with such fine resolution that he was able to see the canals on Mars. In 1977, he joined the B. A. A., and has ground an 8" a 6" f:10.5 and a 6" f:4.7. One of these days he is going to try to make a 4½" Schiefspiegler because of its excellent resolution. At present he enjoys the 5" RFT which he purchased from Sprucelands. Bob assisted Ed Lindberg in the Telescope Making course in March and May which was part of the museum's Educational Program.

In 1966, Bob and Patricia Shaw were married, and they have two children, Brian 13, and Louise 11. Pat is very accomplished in crewel and quill work, and is also skilled in macrame and the making of afghans. The family delights in hiking and taking little jaunts to such places as Watkins Glen, Letchworth Park, and Robert Tremaine State Park in Ithaca with its steep trails.

Bob is an ardent B.A.A. member, at ease in any group, with his warm, amiable personality. He is dedicated to his family and bluegrass music, and the many nice people he meets as he travels with the Border City Bluegrass Band.

Edith Geiger

* * * * *

The man who loaned his telescope, does NOT own it any more!!!

* * * * *

September Constellation

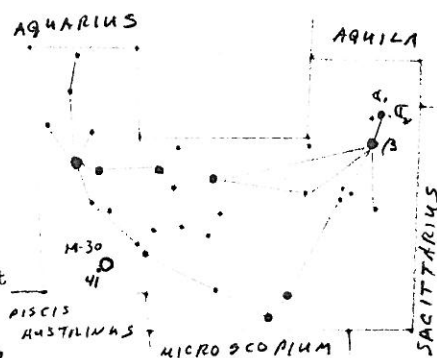
NOCTURA, The Night Owl / TURDUS SOLITAIRE, The Solitary Thrush are two constellations from the past, both having been part of Hydra in the catalogues of Burritt and Le Monnier. The Owl has been taken away from the constellation Hydra which is overweighted now. In Burritt's map, it is shown perched on the tail-tip of the Water Snake as well as encroaching on the boundary of the Southern Scale. Le Monnier pictured it as 'Turdus Solitaire' or the Solitary Thrush. The title is said to be that of the Solitaire, formerly odd to the small island of Rodriguez in the Indian Ocean about 350 miles to the east of Mauritius; although the bird has been extinct for two centuries, so has the constellation.

Little seems to be known of this sky figure, although Ideler wrote of it as 'Einsiedler', the German Drossel.

- - - - -

October Constellation

One of the Zodiacal constellations is up and ready for observing. On the north it is bordered by two constellations, Aquarius and Aquila; on the east by Sagittarius; on the west by Aquarius; and on the south by Piscis Austrinus, Microscopium, and Sagittarius is the constellation CAPRICORNUS. It is not really a very conspicuous asterism but does contain a few interesting objects. Alpha (Algedi) is a naked eye double, at RA 20h 15m - dec. -13°. Their magnitudes are 3 and 4 and are separated by 376" of arc. Beta (Dabih Major & Dabih Minor) is another double at



Beta (Dabih Major & Dabih Minor) is another double at

RA 20h 18m -dec. -15°. The main star is yellow, magnitude 2.5, while its companion is blue and magnitude 6. It is separated by 204" of arc. Near the star '41' is a globular cluster, M-30 and is one of the better globular clusters to observe in small telescopes.

In 1846, on the 23rd of September, Dr. Johann Gottfried Galle visually discovered the planet Neptune with the aid of Urbain Jean Joseph LeVerrier.

* * * * *

For those who remember the Michigan forest fires which darkened the north-eastern skies, limiting stellar observing, have to be one hundred years old as it happened on September 6, 1881.

* * * * *

QUIZ-CRYPTS:- Each group is individual and not related to the others for decoding. The topic is given for each with a sample of what you will find among them when solved. To solve these crypts, simply substitute the letters to the proper letter of the alphabet. Remember that if 'V' stands for 'R' in one word, it does for the rest the category with the example.

1) SOLAR SYSTEM	2) STAR NAMES	3) CONSTELLATIONS
example: Sun	example: Canopus	example: URSA MAJOR
HNKGC	HZFZIH	ANXVW PNDL
ZLXD	FZRZN CGXJ	QSSKTW
RJHAGFX	QFVJIFIH	JCLN
FLXGP	TGRQ	NFLVON
KFBJD	VQYGNNQ	TIVENXFW
JXLBJD	FZRG	NHFVJN
DLGJXB	YFWVOWX	ACOXFW
BFHCJBF	QVDGFXQF	ZTLWTFW
ZFXTJXW	DQBQF	NXELSPEN
LDGFXCAED	QNJQZF	ATKFW
TCZFGD	PGJGNRIGHG	PSXSATLSW
ZCCBD	QNBGPQFQX	EINAS

Answers will be supplied in the next 'Spectrum'.

* * * * *

Answers to QUIZ!

- 1) An instrument which measures very small temperature differences.
- 2) A stone which falls from the sky and reaches the earth, i.e. meteorites, fireballs, etc.
- 3) The 'alidade', by aligning the star with two fixed points, using such things as a wire and a small hole at the ends of a rule. This instrument was used with success by Tycho Brahe.
- 4) Somewhat rare meteorites which are composed of metallic elements (iron & nickel) differentiating from the more numerous meteorites composed of silica with other oxides and less metal.
- 5) As matter may collapse into a black hole singularity, likewise a singularity may pour outward into a white hole gusher.
- 6) Reversing layer, chromosphere, and corona.
- 7) (a) Exceedingly bright areas in the photosphere.
(b) Clouds of calcium vapor.

* * * * *

DO NOT FORGET THE NEW STARTING TIMES OF THE B.A.A.!!

MEETINGS WILL BEGIN AT 7:30 P.M. SO THAT WE MAY

ENJOY OUR SOCIAL HOUR, HALF AN HOUR LONGER ----

During the recent apparition of Jupiter I observed the planet with my eight-inch reflector and made sixteen full-disc drawings. The first of these was made on March 25th 1981 and the last on June 6th 1981. Powers used were 224X and 280X. I frequently used an apodising screen slipped over the open end of the telescope tube. The screen is a device that helps to improve contrast of wispy details on planetary discs and to reduce the effects of atmospheric turbulence. There is some loss of image brightness, however. (The apodising screen simultaneously achieves all of these effects by reducing the amount of light in the first bright ring of the diffraction image of a point source of light at the focus of the telescope objective, while leaving the central disc unaffected. It is a device that should be more widely known and used and it is easily and inexpensively made from simple materials.)

In my observations of Jupiter, I never seem to see as much detail as is shown in many of the drawings of the planet made with telescopes of comparable aperture to my own that are published in periodicals such as the Journal of the A.L.P.O. I think that this must be due to the generally rather poor seeing and indifferent atmospheric transparency in the Buffalo area. However, I trust that the following summary of my observations will give a fair impression of the general appearance of Jupiter between March and June of this year. By comparing these notes with similar 'Jupiter summaries' in previous editions of the 'Spectrum', the reader will appreciate how changeable is the face of Jupiter from one year to the next.

The disc of Jupiter is traversed by dusky cloud belts and lighter zones. The accompanying diagram shows their general appearance and nomenclature.

Summary of observations.

SPR - Usually dusky, no detail visible.

SSTB - Sometimes visible as a thin faint line.

STB - Usually easily visible and more prominent than the SSTB. Does not seem to encircle the planet completely. Sometimes a light 'oval' associated with this belt.

and on one occasion of fine seeing, some parts of the belt were seen to be darker than others.

STrZ - A dark patch seen here on one occasion.

SEB & GRS - This and the NEB are the most prominent of the cloud belts. The south edge of the SEB was often darker than and more sharply defined than the north edge. On one occasion a distant light rift was seen within the belt - this may have been the usual division between the north and south components that this belt is divided into. On four occasions a distant deep semi-circular 'bay' was seen on the south edge, this being the GRS hollow. However, no trace of the GRS itself was seen. (The GRS has become decidedly paler during recent years).

EZ - Occasional wispy details seen and vaguely defined light and dusky areas.

E Band - Sometimes seen as a faint line, usually incompletely traversing the disc.

NEB - Always of about the same width and intensity as its southern counterpart. Usually of a quiescent appearance with occasional pale 'wisps' extending from its south border into the EZ and bending toward the following limb. Sometimes 'humps' and 'bays' seen on the south edge and on one occasion a light rift seen towards the following end of the belt.

NTB & NNTB - Not seen on any occasion as separate belts - but see under NPR.

NPR - Always dusky and merging imperceptibly with a general duskiness of the area normally occupied by the NTB and NNTB, so that a large part of the whole northern hemisphere was taken up with this region. It was featureless apart from a narrow light zone seen traversing it on one occasion - perhaps the NTB and NNTB had merged into one band that was separated from the true NPR by this rift. The south edge of the whole dusky zone often had a well defined south edge which was sometimes slightly darker than the rest of the duskiness. No other detail was seen including the 'rafts' which are short dark linear features frequently seen to the north of the NEB. The rafts were conspicuous by their absence.

General impression - A relatively quiescent Jovian disc compared with previous years.

JUPITER - cloud belts and light zones

Light zones

South south temperate zone (SSTZ)

South temperate zone (STZ)

South tropical zone (STrZ)

Equatorial zone (EZ)

North tropical zone (NTrZ)

North temperate zone (NTZ)

North north temperate zone (NNTZ)

Cloud belts

South polar region (SPR)

South south temperate belt (SSTB)

South temperate belt (STB)

(GRS - Great Red Spot)

South equatorial belt (SEB)

Equatorial band (E Band)

North equatorial belt (NEB)

North temperate belt (NTB)

North north temperate belt (NNTB)

North polar region (NPR)

Direction of rotation
Leading ← → Following

OBSERVATIONS by MEMBERS

During the last week in June, I observed Jupiter and Saturn with an amazingly white background of stars, using a 4" Rich Field Telescope, in the Adirondack Mts. On July 16th, on a trip to Ontario, I was able to observe the partial eclipse of the Moon.

Having recently received an 8" f:10 telescope, I am able to observe Jupiter and Saturn and several Messier objects (M-8, M-16, M-22 and others). I have also seen double stars which are readily split with the larger telescope.

At 4:00 AM on August 12th, I stretched out on the ground and in one hour was able to see 50+ meteors of the Perseids; also a few sporadics from the southern horizon. Some of the Perseids were well defined with a greenish afterglow. It is fun just to watch throughout the night to see the stars break above the horizon in the east, such as the Belt of Orion, Castor and Pollux, and the many other first and second magnitude stars which are readily recognized on the horizon.

David Bertuca

* * * * *

Mercury and Mars were seen on the morning of July 30th along with the Trapezium star cluster in Orion.

August 1st, an airplane was seen to pass through the center of the 1.9 day old crescent Moon.

At the July 31st BAA star party at Beaver Meadow, the galaxy groups (Stephen's Quintet in Pegasus) was observed.

At 9:50PM, 5 miles east of Medina, N. Y., while driving, a bright green light was seen moving like an airplane's starboard wing light, but it wasn't. It turned out to be a -10 magnitude meteor in Sagittarius, with a train at least 30 degrees long. It was moving west and downwards on a 20 degree angle, then suddenly it broke-up about 10 degrees above the horizon.

Carl Milazzo

* * * * *

Many observations were made through the summer by myself and with others attending the various star parties. My own observations were as follows:-

July 24th - using Larry Carlino's 17.5" Dobsonian I saw M-51, M-8, M-17, M-13, M-27, M-31, M-57, M-22, NGC-6960 and 6992-5

July 30th - completed my 8" f:7.5 Newtonian.

July 31st - with the Astroscan I saw M-27 and with my new telescope, I also observed M-57

August 5th - Tried to get photos of the moon through the 8" telescope which turned out slightly underexposed. Also looked for and saw M-13, M-92, M-17, and M-22

August 7th - the night I hosted the BAA star party it turned out cloudy, but later it did clear enough for Carl Milazzo and myself to observe M-31, M-32 and M-103.

August 10th - After the moon set I was able to see M-71 and later I again saw M-31, M-32 and NGC-205.

August 11th and 12th - I enjoyed watching the Perseid meteor shower. At one point I was able to record 65 in one hour

Steven Desmond

* * * * *

July 16-17 I was able to record and photograph a small segment of the partial eclipse of the Moon. It wasn't until after midnight that I was able to see any part of the eclipse but it did clear to see the end.

Darwin Christy

The STUDY GROUP

The first study group meeting this year will be an organizational meeting to determine our topics for the year. I would like to have members of our group who have been teaching courses at various places go through some of their material for the study group members. Some of the questions I have heard from clubmembers have lead me to believe they could all use a refresher. We will meet at 8:00 P, the Friday following the regular BAA meeting in the New Science Building at Buffalo State. Our room is the science dept. conference room across from the vending machines.

ALL B.A.A. MEMBERS ARE WELCOME

* * * * *

B.A.A. ANNALS

5 Years ago - The September and October meetings featured Dr. Gunter Wessel who spoke on Jupiter and Dr. Martin Green on Television Astronomy respectively. The September-October issue of the 'Spectrum' featured an article by Fred Price thanking members for his re-election as President of the B.A.A. In the same issue Mr. Kurt Erland of the Buffalo Museum of Science included a plea for members to assist the B.S.N.S.

10 Years ago - The September 1971 meeting was presented as "member's night". Several members of the group reported on summer activities, new projects and observations. The October meeting was addressed by Walter Semerau who explained his solar equipment and showed a film detailing his work. The 'Spectrum' for those months contained an unusual article by Orrin Christy describing observing in Viet Nam with a starlight scope.

15 Year ago - The September 1966 meeting of the BAA was treated to a lecture on amateur astronomy through the ages by Ernst Both. During the Hamburg Fair that year, the BAA put on an exhibit to inform the public about astronomical activities. The October 1966 meeting featured members of the instrument section explaining their function and answering questions. The preparations for the Astronomical League Convention were taking up a large part of the member's leisure hours.

Ken Kimble

* * * * *

The INSTRUMENT SECTION

The Instrument Section meets on the forth Fridays of each month in the Museum of Science. For information about these meetings, contact Ed Lindberg - 633 6725.

Anyone interested in getting started on building your own telescope, this is the place to go to learn.

* * * * *

It is learned that Shigeru Morikubo, a Japanese amateur astronomer, was to have attended the International Union of Amateur Astronomers in Bussels, Belgium this past August 1st. He was invited to give a paper on the Solar Eclipse of February 16, 1980 which took place at Raichur, India. It is hopeful that we can have a report from Shigeru for the 'Spectrum'.

* * * * *

ARTICLE ARE NEEDED TO KEEP THIS PAPER GOING. The deadline for the next "SPECTRUM" in October 23rd 1981. PLEASE - I need help from you the membership to keep it alive !

Anything will do - small articles - OBSERVATIONS - IDEAS - Feature articles - for sale - items needed - Sectional meetings - Beaver Meadow Observatory happenings - reports of the Summer Star Parties.

You have two months to write something!!

MEMBERSHIP LIST

1980-1981

Marguerite Aiple

Klaus, Johanna, & Mark Baerwaldt

Melinda Barber

Robert Belkota

David Bertuca

Kenneth Biggie

Octavia Black (Honorary)

Ernst & Billie Both

Dr. Gilbert, Lois, & David Brink

Kenneth Burke

Lawrence Carlino

Miro & Joanne Catipovic

Darwin & Ruth Christy

Orrin Christy

Daniels Collins

Gertrude & Bruce Cook

Steven Desmond

Thomas Dessert

Robert Dietrich

James Dow

Jane Dow (Honorary)

Rev. Herbert Englehardt

Terrance Farrell

Walter Gall

Randolph Garney

Carroll & Edith Geiger

Art Gielow

Irving & Esther Goetz

Allen & Ms. Karen Gross

Gary Herrnreiter

Edward Huck

Richard Janas

Michael & Nellie Jason

Dennis & Jane Jewell

David Junkin

Ernest & Beverly Keifer

Kenneth & Adrienne Kimble

Gary Kirst

William & Ms. Anita Kirst

Doris Koestler

Alphonse & Mary Kolodziejczak

Anthony Lang

Michelle Lavaway

Edward Lindberg

Dr. Jack & Jane Mack

James Machowski

Richard McCarthy

Curt Mancuso

Robert Mayer

Carl & Joseph Milazzo

Leonard Milks

Allan Mohn

Lorne Moore

Steven & Judy Noworyta

John O'Dee

Gregory Pawlak

Dr. Fred Price

Joseph Provato

Arthur & Margaret Rabe

Kenneth Ranchil

John, Suzanne & James Raymonda

Robert Reilly

Alfred Ricciuti

John Riggs

Rowland & Irene Rupp

James Russell

Robert & Patricia Schneider

Walter Semerau (Honorary)

Egbert Swoboda

Lillian Von Gerichten

Walter Whyman

Eugene Witkowski

Paul Young

Elton Rock

Claudia Bielinski

John Dlugosz

Gerrold Foster

Thomas Kawa

Leise Ness

Christopher Stokes

Michael Thomas

Patricia Warner

John Yerger

Lets try for more members and another GOOD year!!!!



A few dots here and a few dots there.
 Answer will appear in the next "Spectrum".

According to Norton's Star Atlas, these constellations
 appear but are void of any bordering constellation.

-8-

The Buffalo Astronomical Association, Inc.
 "The SPECTRUM"
 % Darwin Christy, Editor
 216 Kohler St.
 Tonawanda, N. Y. 14150