STAR STUFF

Volume 7 Number 1 February 1998

FAAC Elects New Officers

The Ford Amateur Astronomy Club has elected it officers for the coming year. Elections were held at the general meeting on January 22nd.

- **President** **Greg Burnett**
- **Vice President** **George Korody**
- **Treasurer** **Ray Fowler**
- **Secretary** **Harry Kindt**

A very special Thanks to last years officers, they all did a great job. Not the least of which was the outstanding star party at Island Lake, the Hale Bopp comet party at Kensington Metro park.

We all look forward to this year's activities and welcome the new officers.

FAAC Shirts

Anyone that ordered a shirt with the FAAC logo can pick it up at the Feb. 26th meeting. Or make arrangements to have someone pick it up for you. See Ray Fowler our Treasurer.

House Bill 4254
The Light Pollution Bill

The light pollution bill has passed the Michigan House and is now in the Senate committee for Technology and Energy. Representatives from the area clubs are planning a trip to Lansing with Norbert Vance of EMU as our spokesman to testify before the committee. If you would like more information on this bill or the trip to Lansing contact Jack Kennedy at 248-399-9403 or

Second Annual Holiday Party

The Second Annual Informal Gala Holiday Party

When: Saturday, March 7, 1998

Where: Papa Romano's Headquarters & Restaurant
45355 Helm St. Plymouth, MI 48170

Time: Reception 6:30PM Buffet Dinner 7:30PM

Cost: $15.00 per person

Particulars: There is no bar, however you are invited to bring the beverage of your choice (coffee, tea, and soft drinks are provided). After the dinner there will be presentations, door prizes, surprises, and lots of great chat.

Directions: Take M-14 to the Sheldon Rd. exit. Go north a couple blocks to Helm St. which runs west from Sheldon Rd. Papa Romano's is located at 45355 Helm St.

Contents

- New officers
- Editors Corner
- Featured Highlighted : Northern Cross Observatory
- Observations by Greg Burnett
- Meeting Minutes from January 22nd
- Road Trip by Clayton Kessler
- A Soft Asteroid from S&T
- Astro Lingo by Paul Mrozek
- Statistically Speaking
- Observing List: Orion Constellation

Star Stuff
Monthly Publication of the:
Ford Amateur Astronomy Club.

Star Stuff Newsletter
P.O. Box 7527
Dearborn, Michigan 48121-7527

1998 Club Officers

President	**Greg Burnett**
Vice President	**George Korody**
Treasurer	**Ray Fowler**
Secretary	**Harry Kindt**

General Meetings
The Ford Amateur Astronomy Club (FAAC) holds regular general meetings open to the public on the fourth Thursday of the month at 5:00 PM. Meetings are held in conference room 1029 of the Ford Credit Building

Observing Site
The Ford Amateur Astronomy Club has an established observing site, by permit, at the Spring Mill Pond area of Island Lake Recreation Area in Brighton, Michigan located near the intersections of I-96 and US-23. Members are responsible for opening and closing the gate after the parks 10:00 PM closing time. (Summer season only)

Observing Hot Line - (313) 390 5456
On Friday and Saturday nights, or nights before holidays, you can call the hot line number up to 2 hours before sunset to find out if we will be observing that night.

WWW Page
FAAC maintains a web page on the internet at URL:
http://kode.net/~dougbock/faac/
Ford Intranet at:
http://be0084.be.ford.com/shl/faac

Membership and Dues
Membership to the Ford Amateur Astronomy Club is open to both Ford employees and the general public. The dues structure is as follows:

Annual Individual/Family	$ 20.00
Lifetime Membership	$100.00

Membership benefits include a subscription to the Star Stuff newsletter, discounts on subscriptions to Astronomy and/or Sky and Telescope magazines, after hours use of the observing site at Island Lake, and discounts at selected area astronomical equipment retailers.

Newsletter Staff

Editor:	Jack Kennedy	248-399-9403
	e-mail	jjkenn@ibm.net
	work	248-616-5492

Editors Corner

By Jack Kennedy

With Paul Mrozek getting a well deserved break from the Star Stuff, I have agreed to become the new editor. Since joining FAAC I have been wanting to contribute something to the newsletter. You will notice that this issure is called the February issue, even though it is the first of the new year. This gets the month in line with when you should receive it. I am really looking forward to putting together our newsletter each month with the contributions I am sure all of you will want to make. This issue may look a bit unorganized until my expretise with MS Publisher improves.

There will be a few new articles that highlight the activities that the club was involved in or will be involved in each month. We will be profiling members/activities each month, and we are planning to provide a list each month of highlights in the night sky for the coming month.

All contributions to the newsletter are welcome. Please submit in written or plain text form.

Lastly this newsletter will be available on-line on the FAAC web page as soon as the format change to HTML can be worked out.

-Humor- Humor- Humor- Humor-

Late Breaking News

- NASA Desides to call it quits. Space shuttles for sale.
- All exterior lighting considered unnecessary and all fixtures turned skyward.
- Black Hole discovered in Washinton D.C. No comments necessary.
- Last words from Mars pathfinder " Hey what is that coming this way, it looks like ahhh.....?"
- Intel Announces the Pentium Platium Chip. For those with a good credit rating.
- MicroSoft announces Windows 99 which includes all know software.
- Global warming conference posponed due to winter storm and heavy snow fall.

Feature of the Month

Northern Cross Observatory

Doug Bock

For those that do not know Doug Bock he is our senior astronomer. Doug has been an astronomer for 30+ years and he is the resident astronomer of the Northern Cross Observatory (NCO). Doug is a past president of the Warren Astronomical Society. From 1975 to 1976 Doug was President of the MSU Astronomy Club, and Editor of the newsletter "Out Of Focus". In 1978 He was 1st VP of the Warren Astronomical Society. In 1980 he was President of the Warren Astronomical Society and Vice-Chairman of the Great Lakes Region of the Astronomical League. In 1981 he was President of the WAS and Chairman of the Great Lakes Region of the Astronomical League and Doug's wife Robin was Vice-Chair.

NCO

NCO is located on Doug's property in Fenton Michigan. There are currently two working observatories at NCO. A roll off roof observatory that was built about 13 years ago and houses the polar aligned 12.5 f/6 newtonian. This scope is the instrument that Doug has used to collect many of his astro-slides. The second observatory refurbished this past summer houses the 10" SCT and is mounted on the wedge newly designed and built by Clay Kessler. NCO also operates a 20" Obsession and an 8" newtonian.

Over the years that Doug has been doing astronomy at NCO, he has seen the sky gradually brighten as urban sprawl and poor designed lighting slowly brightens the sky. The sky at Doug's still offers great viewing on clear dark nights. If you have not taken Doug up on his offer of a star party or one of the meetings held regularly there, you really should make the drive. The observatory is located about 15 minutes north of I-96 on US 23. You an contact Doug by email from his web page at: http://bsd1.kode.net/~dougbock/

On-going Projects

10" SCT and dome

One of the projects at NCO is to motorize the dome. Currently it is necessary to move the dome by hand. The rotating part of the dome has wheels that rest on the lower half and will rotate to the desired position by hand. Also underway is adding drive motors to the Dec and RA of the SCT. Clay has also built a counter weight system and an accessory bar for the SCT to allow easy setup of film/imaging equipment.

Split Ring Mount

Still in the planning stages is a split ring mount system for the 12.5" and also the 20" to allow these scopes to track on objects. This will allow the scope to be used for astrophotography.

Remote Astronomy

As the different scopes gain the ability to track and then GOTO desired objects, one will be used to take the next step, remote operation. This has been the subject of the Remote Astronomical Telescope (RAT) meetings held at NCO for about a year.

Conclusion

Doug has been a ready and willing resource for us novices for a long time. When you see him at the next meeting or a star party make sure to say hi...

Observations
by Greg Burnett

The beginning of a new year is traditionally an occasion for speculating about the future. Some newyear predictions are proffered by "psychics" who claim prescient abilities. Others are forecasts, by economists, social scientists, and other professionals, of where our cultural and social worlds seem to be going. In the areas of science and technology, science fiction writers have made predicting the progression (and often the fate) of humankind a year-round industry. With the beginning of 1998, I have a couple of predictions of my own to offer for your consideration, but with a slightly different twist.

Recently we have seen astoundingly detailed images from the Hubble Space Telescope of planetary nebulae, gaseous remnants of stars that have reached the end of what we might anthropocentrically call their "useful" lives. Some of these wonderful pictures have appeared in the popular press, almost always accompanied by explanations, to assuage the doubts of an often disaster-mongering public, that our own Sun is not expected to suffer this fate for perhaps another five billion years. This got me thinking: What might be the state of Humankind by that time, assuming we somehow make it that far at all? Five billion seemed too many years even to imagine, so here's what I think our world might be like a mere one billion years from now.

A BILLION YEARS FROM NOW...
We will all be of one race. Cheap and fast transportation, and the natural gregariousness of people, will have dissolved cultural and racial boundaries. We will be of one faith, for much the same reason. We will be one nation, with no regional distinctions based on level of "development." We will have achieved controlled population growth, but I won't speculate on exactly how this will be accomplished. That these (and other) issues will be resolved is an easy guess; it's impossible to imagine us surviving into the far distant future unless we do resolve them.

We will have unlimited and essentially free energy, from solar and nuclear sources. As a result, the economic structure of that time would probably be unrecognizable to us living today. Hunger and disease will be unknown. Environmental problems will be nonexistent. Computers will perform nearly every important function required for the maintenance of civilization, leaving humans free to pursue art, music, and other "creative leisures." Science as we understand it today will have ended, leaving a technical world consisting solely of engineering applications. Engineering will have merged with art, with form no longer necessarily following function. We will have overcome most of the limitations of space travel, although it will still be inherently challenging, and we will be well into the process of colonizing our corner of the galaxy.

The Ford Amateur Astronomy Club (affiliated with the Ford Interstellar Transportation Company) will have about a million members. However, things will not be completely rosy; there will still be a running debate about the advantages of refractors over reflectors. Of course, Bob Fitzgerald will still be using binoculars, but they will be truly incredible binos!

Best wishes to everyone for a prosperous new year! We'll get there one year at a time!

ASTRO LINGO
by Paul Mrozek

Accretion disc - A disc of hot gas that sometimes forms around a spinning
object, such as a black hole or the smaller member of a binary star.

Acronical observation - Observing a star that is just rising or setting shortly
after sunset.

(Continued on page 7)

Meeting Minutes for 1-22-98 by Harry Kindt

In the absence of our president, Bob MacFarland, Greg Burnett presided over tonight's meeting. The meeting was called to order at 5:05 PM, there were 25 members and guests present. In a slight change of procedure, we decided too have our pizza and pop earlier in the meeting. It is at this point in the proceedings that those present have a chance to introduce themselves and to describe their viewing experiences since our last meeting.

The treasurers' report was read and accepted. Ray Fowler also reported on the progress of our scholarship fund. Not counting the monies collected at this meeting, we have a total of $294.00 in the fund.

Greg Burnett reported that the plans for our 2nd Annual Dinner Party are all in place—Our thanks to George and Pat Korody for their efforts in putting this together--The party is to take place On March 7, 1998 at Papa Ramano's headquarters and restaurant. The doors will be open at 6:30 PM and dinner will be served at 7:30. The restaurant will be providing setups and you will be allowed to bring your own "refreshment's". The cost of the dinner will be $15.00 per person and you will have to have the money in by our next meeting. You may also send a check or money order to the club's P.O. Box indicating that the money is for our Annual Party. We look forward to seeing you all there.

Representatives' from our club, and other clubs' in the South Eastern Michigan area, have been meeting with the officials at Kensington Metro Park in an effort to put together another star party. Thus far we have set aside the tentative dates of May 1st and May 2nd as our target dates. More information on this event will be made available in future newsletters.

Greg Burnett reported that—based on our meeting time survey—most members elected to retain the present schedule and location. Our thanks to Bob Fitzgerald for his analysis of the survey results.

The executive committee met recently and proposed a plan to create, what we called, Appointed Positions. The idea behind the plan is twofold: (1) too relieve the elected officials of some of their "burdens of office" and (2) too encourage more active participation by the general membership in our clubs' activities. The following positions were proposed and are still open:

Membership Chairperson
Program Chairperson
Promotions Chairperson
Observing Chairperson
Refreshments Chairperson

We would encourage anyone who might be interested in any of the above, or would like a more detailed description of the duties of each, to please contact anyone on the executive committee.

The election of club officers was conducted at this meeting. Nominees were Greg Burnett, President-George Korody, Vice-President-Ray Fowler, Treasurer-Harry Kindt, Secretary. Doug Bock was placed in charge of the election and called for any additional nominees from the floor. No new nominees were forthcoming, so the election was held. All candidates were elected by acclimation.... meet your "new" officers:

Greg Burnett—President
George Korody—Vice President
Ray Fowler—Treasurer
Harry Kindt—Secretary

Greg Burnett announced that our contract with the Island Lake Recreation Area is coming up for renewal. As part of our negotiations, we will be asking the park officials to provide us with a key to the rest rooms for our after hours viewing sessions.

Greg also mentioned that, although Island Lake has provided us a good viewing site since 1992, light pollution is becoming a problem. With this in mind, we are all being asked to think about locating a new site for our viewing.

Jack Kennedy gave a brief talk on the progress of HB-4254, the so called light pollution bill. The bill is now in the Senate Committee awaiting discussion. We are all encouraged to contact our representatives in Lansing in support of this bill. For information on how to contact your Representative or State Senator, please contact Jack Kennedy.

Our presentation for the evening was a videotape, provided by Bob MacFarland, on the Aurora Borealis. The film showed an interesting juxtaposition between the myths and legends about the Aurora, provided by the native people who live near the Arctic Circle, and the current scientific knowledge we have about this phenomenon—one of the most awesome and beautiful displays nature provides.

The meeting was adjourned at 7:45PM.

Submitted 1/23/1998
By Harry Kindt
Sec'y FAAC
E-Mail : hkindt@voyager.net

Kensington Metropark Spring Festival
Star party May 1 - 2, 1998

Sponsored by :
The Great Lakes Amateur Astronomy Clubs

Road Trip Review — January 8, 1998

by Clayton Kessler

Now - I don't want anyone to get the wrong idea. I **DO NOT** jump in the car on a whim and drive great distances to "window shop" for telescope stuff. I have to have an excuse before I will go.....admittedly it can be a feeble excuse but there HAS to be an excuse!

Several months ago I mentioned to my daughters that there seemed to be two telescope shops in Toronto that advertised in Sky & Tel and Astronomy magazine regularly and I thought it would be "neat" to visit them. Over the holidays, while college was out, my daughter's both asked me when "we" were going to Toronto. **HA!** - I had my excuse, time for a **ROAD TRIP**.

There are two shops that advertise regularly, Efston-Science and Kahn Scope Centre. By some quirk of a smiling fate they are on the same street and only two blocks apart! A quick trip to the Internet revealed a map to EfstonScience and so the trip was "planned". Fate was also kind in the fact that a major shopping mall was located across the street from EfstonScience, giving convenient parking and a connection to the Toronto Subway System.

We took our one day trip on January 6th leaving at 5:00 AM. The weather smiled on us and I enjoyed driving in the 59 degree temperature. Toronto is easy to get to - a straight shot up the 401 expressway. The Yorkdale Mall is just off of the freeway at Dufferin Street so there was no wandering around in unfamiliar territory. We arrived at about 10:00 AM and spent the next couple of hours in "telescope heaven".

EfstonScience
3350 Dufferin St.
Toronto, Ontario
Canada
Ph (416) 787-4581

EfstonScience is located in a modern three story building right across from the mall. The 6 times size model of a 4" refractor and GEM mount on the roof made the place impossible to miss - it could be seen from the freeway! Inside I was amazed - there were at least 50 telescopes, of all types, on display. The first thing I saw was a Meade 16" Newtonian OTA mounted in a clever split ring equatorial mount. The humorous write up on the telescope said that "this scope is perfect for the avid amateur astronomer - you could even be buried in the tube when the time comes!"

There were telescopes of all sizes and skill ranges on display - from the Edmund Astroscan to the Meade LX200 12". There were also used telescopes here - up to and including a Zeiss 6" Cassegrain with an observatory mount that was priced at $10,000 Canadian. Two large display cases held accessories and binoculars. It looked like there were complete sets of Meade, Celestron, Tele-Vue and Orion eyepieces and optical accessories. There were at least a dozen different finder scopes, filters, drive computers - really too much stuff to list! Efston-Science also had a very large astronomy book section with a good selection of hard and soft cover books, sky maps and periodicals.

I should make mention of the split ring mount I saw there. There were several sizes on display. This mount was designed to replace the alt-az style mounting on the average dob telescope. while the mount was not motorized it could be polar aligned and tracking for visual observation was smooth and simple. I got into a conversation with a fellow customer and it turned out that he was the designer and builder of these mountings! A motorized version is in the works and the production version available now is getting smaller and less bulky. All in all for $399.00 Canadian ($248.00 US) they seemed a nice mount for someone with, or building, a Dob scope.

EfstonScience is also a distributor for Edmund Scientifics and Jensen Tools. The second and third floors of their shop were crammed full of high quality tools and almost everything in Edmund Scientific's catalog! Several hours could be spent poking around in the fascinating doodads and gizmos on display.

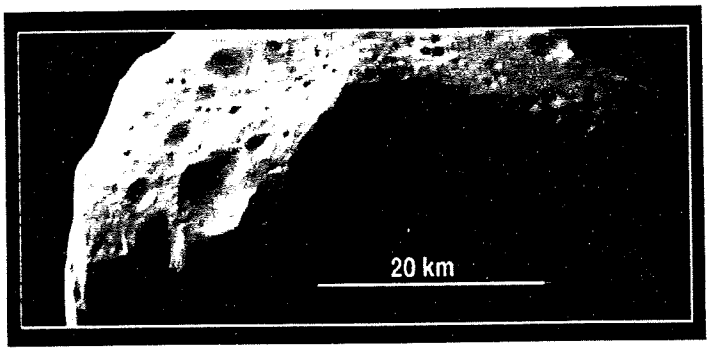
Khan Scope Centre
3243 Dufferin St.
Toronto, Ontario
Canada
Ph (416) 783-4140

After a brief stop at the car, to check the address, we set off on foot for Khan Scope Centre. A pleasant two block stroll put us in front of the store. Khan Scope Centre is located in a strip mall and the building is smaller that EfstonScience. On the other hand - all they have here are telescopes and accessories. As we entered the shop I was again impressed at the number of telescopes in stock. Dobs up to 12", refractors up to 4" and SCT's up to 12" were on display. As I perused the displays I noticed that among the new scopes were used bargains. It was definitely worth the time to look closely at the scopes trying to find a "sweetheart deal".

A large display case held new eyepieces and accessories and also had a dedicated shelf for used equipment! There was a good stock of Meade, Celestron, TeleVue, Lumicon, JMI and others. There were CCD cameras and even a "cold camera" in the case. Among the jewels on

(Continued on page 7)

From Sky & Telescope Magazine:



A Soft Asteroid

Results from last June's flyby of minor planet 253 Mathilde by the Near Earth Asteroid Rendezvous (NEAR) spacecraft were published Dec 19th in the journal *Science*. Researchers report that Mathilde is blacker than coal
and rather porous. The latter characteristic could explain why the 60-kilometer-wide rock has such an
inordinate number of giant impact scars. According to NEAR imaging team leader Joseph F. Veverka (Cornell University), this means that large objects have been able to strike the asteroid's surface without destroying it. "Hitting Mathilde is like hitting a Styrofoam cup or packing material," he says. However, one nagging question was not answered by NEAR's close scrutiny: why it takes 17 days for the asteroid to rotate. The leading explanations for its sluggish behavior were that the spin was slowed by outgassing or by gravitational
interaction with a satellite. NEAR found no evidence of either. NEAR continues on and will make a swing by Earth on January 23rd, and then reach asteroid 433 Eros in January 1999. For more information, see "NEAR Views of Mathilde" in SKY Online's Special Reports area.

(Continued from page 6)

the used shelf was a 4.8mm Nagler that looked new. It was marked $199.00 Canadian ($124.00 US) which seemed consistent with advertised used prices on Astro-mart. I also noticed a Meade LXD750 GEM with tripod that was marked $995.00 Canadian ($620.00 US). This mount looked new and seemed very large and steady.

Another display case near the counter held finished mirrors for ATM's. I got the impression that a lot of ATM equipment was available from stock or by special order.

Trip Summary:

I was pleasantly suprised by this trip. Either of the shops would have been worth the trip but to have both of them two blocks apart was amazing. Both places had very friendly and knowledgeable people that were happy to help, answer questions, shoot the breeze or just let me browse. I did not inquire if offers on the used equipment would be entertained, but I would certainly try if there was something that I "couldn't live without". The overall experience was a "10" and I will go again soon.

The rest of the trip? There was a Toronto subway stop at the Yorkdale Mall. As always, the subway there was clean, efficient and cheap. We went downtown and we shopped and strolled all afternoon. We even spent a couple of hours at the Royal Ontario Museum. We arrived back at the car at 7:00 PM and had a restful trip back down the 401 to Detroit.

Under the "Great Gray Rock of Winter" here in Michigan it's sometimes difficult to find a way to stay active in our hobby. I was energized by this trip and it will help me to keep up my interest level until it gets clear here again. I highly recommend this trip and will gladly offer my services as a "tour guide" just call and say **"ROAD TRIP"**.

(Continued from page 4)

Albedo - The proportion of light reflected by a celestial body.

Apastron - The positions of binary star members when they are the farthest
apart.

Apex - The point on the celestial sphere (R.A. 18h, Dec. +30 deg) towards which
the Sun is
moving relative to the other close stars.
st known as the Horsehead Nebula. This dark nebula

Appulse - Two celestial objects that appear to touch, but actually narrowly
miss each other.

Black drop - An illusory effect in which a small black spot appears to join the
limb of the Sun with
the nearby dark disc of Venus or Mercury during a transit.

Ford Amateur Astronomy Club
Star Stuff Newsletter
P.O. Box 7527
Dearborn, MI 48121

Statistically Speaking

Detroit, MI Latitude: 42° 19' 48" N Longitude: 83° 02' 57" W
Local Time = UT - 5.00 hours Elevation: 178 meters

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
SR: 07:46	SR: 07:45	SR: 07:44	SR: 07:43	SR: 07:41	SR: 07:40	SR: 07:39
SS: 17:46	SS: 17:48	SS: 17:49	SS: 17:50	SS: 17:52	SS: 17:53	SS: 17:54
MR: 10:27	MR: 11:03	MR: 11:40	MR: 12:19	MR: 13:02	MR: 13:49	MR: 14:40
MS: 23:18	MS: None	MS: 00:28	MS: 01:36	MS: 02:41	MS: 03:43	MS: 04:40
		FQ: 17:55				
8	9	10	11	12	13	14
SR: 07:38	SR: 07:37	SR: 07:35	SR: 07:34	SR: 07:33	SR: 07:32	SR: 07:30
SS: 17:55	SS: 17:57	SS: 17:58	SS: 17:59	SS: 18:01	SS: 18:02	SS: 18:03
MR: 15:35	MR: 16:32	MR: 17:31	MR: 18:29	MR: 19:28	MR: 20:25	MR: 21:22
MS: 05:31	MS: 06:17	MS: 06:57	MS: 07:33	MS: 08:06	MS: 08:36	MS: 09:04
			FM: 05:24			
15	16	17	18	19	20	21
SR: 07:29	SR: 07:27	SR: 07:26	SR: 07:25	SR: 07:23	SR: 07:22	SR: 07:20
SS: 18:04	SS: 18:06	SS: 18:07	SS: 18:08	SS: 18:10	SS: 18:11	SS: 18:12
MR: 22:19	MR: 23:16	MR: None	MR: 00:13	MR: 01:10	MR: 02:08	MR:03:05
MS: 09:32	MS: 10:00	MS: 10:30	MS: 11:02	MS: 11:38	MS: 12:19	MS: 13:05
				LQ: 10:29		
22	23	24	25	26	27	28
SR: 07:19	SR: 07:17	SR: 07:16	SR: 07:14	SR: 07:13	SR: 07:11	SR: 7:09
SS: 18:13	SS: 18:15	SS: 18:16	SS: 18:17	SS: 18:18	SS: 18:20	SS: 18:21
MR: 04:00	MR: 04:53	MR: 05:42	MR: 06:27	MR: 07:08	MR: 07:47	MR: 08:24
MS: 13:59	MS: 15:00	MS: 16:06	MS: 17:17	MS: 18:31	MS: 19:46	MS: 21:00

Observing List:

Constellation Orion

* Betelegeuse (alpha Orionis) an M2I class star. A red super giant that is 520 ly. A redish star to the naked eye. Betelgeuse is the largest star within 1,000 ly.
* At the opposite corner of Orion is Rigel (Beta Orionis) A double with magnitudes of 0.1 and 6.7 and a seperation of 9.4"
* M78 is a reflection nebulanorth of the left most belt star. M78 at 8th mag this is a challenge to see.
* M42 is one of the treasures of the night sky. The Orion nebula is an active stellar nursury Within the nebula M42 is the trapezium seen in small telescopes as four stars. with clear viewing and high power the fifth and sixth stars may be seen.
* To the south of Zeta Orionis is the dark nebula Bernard 33, best known as the Horsehead Nebula. This dark nebula is silhouetted against the bright nebula IC 434. This one is a real challange to see because of its low contrast and small size of 5 arc minutes.