



STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

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Please send articles to westpark@a.mediaone.net by July 31st for August Newsletter

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Comet LINEAR and clear skies!
By John Ford

(Ed. Note: This was posted to the NCO Bulletin Board on June 27th.

Having given myself the mission to spot Comet LINEAR with my ShortTube-80, I set the alarm based on some favorable weather predictions on AccuWeather.com. Accordingly, I woke at 3:15AM and spotted some stars out my window. Dragged myself downstairs and set the ST80 on the Gibraltar mount, grabbed the binocs and July S&T, and went out on the deck.

WOW! At first, I thought there were clouds overhead...those were not clouds, they were darned stars!! For some reason, all neighbors except one in the next street had their lights off! Pinched myself. (Could still be asleep, and it might actually be raining!) (Also, no mosquitoes! I must be dreaming!) The binocs showed a blanket of stars in Cygnus, and for the first time ever, I could see some faint nebulosity where the North

America Nebula should be. With binocs, I started counting Messiers. Lost count when I finally got down past the Double Cluster and into M34, when I remembered why I was out here...the comet. Oh yeah, the comet.

OK, the chart was on page 100 of S&T. They show the position for June 26, so for today, it should be a bit higher to the right of M34. On the chart, that means that from M34, I hop to the right... to two stars that are vertically positioned, then to three stars that are in a triangle, then across a void to a "U"-shaped asterism of about 10 faint stars. The comet should be just a few arcseconds below and to the left of the "U". Can't see it with the 32mm Plossl (12.5x), so I put in the Radian 14mm. There it is! Just where the chart said it would be! I try the Radian 8mm (50x), and it is definitely the comet. Brightness suffers with the 8mm, so I go back to the 14mm (28x). It is a well-defined small arrowhead with a bright nucleus at the tip that cannot be focused. The nearby "U" asterism stars served as a focusing reference. The tail is not uniform, since I could detect a dimmer, tapered streak in the right portion of the tail. At times, there was a suggestion of a star-like nucleus oddly off-center from the exact tip, but it wasn't easy to pick out. Definitely brighter than the tail, though. Cool.

Took a last look around, Andromeda Galaxy, M32, and the Milky Way in Cygnus again...unreal! Should have had these skies at the Solstice party... Went back to bed at 4:15AM, but of course, couldn't get back to sleep as I watched Jupiter and the crescent moon rise in my window.

Book Review
By Clay Kessler

Deep-Sky Wonders
Author: Walter Scott Houston
Publisher: Cambridge University Press
Publish Date: 1999
Pages: 320
Cost: \$29.95 (hardcover)

This is a compilation of the monthly Sky and Telescope columns written by the late Walter Scott Houston. "Scotty's" first column appeared in the September 1946 Sky and Telescope. They continued until his death in 1993 (his last column was in 1994). Stephen James O'Meara has compiled and combined these wonderful stories into a master observing report for each month of the year.

I must admit that I was not involved in the hobby in a serious way while "Scotty" was writing his column so I have no "nostalgic" attachment to these. I fully expected to enjoy this book but I also expected to pick at it a little at a time. When I opened the cover and started reading I was hooked! "Scotty's" stories and descriptions of his observing experiences are wonderful and my interest was held to the point that I was reluctant to put the book down. Mr. O'Meara has combined these hundreds of columns into a "mega-column" for each month. Each of these reads as if it were written on purpose for this book. This is a very difficult thing to do well but Mr. O'Meara is equal to the task.

STAR STUFF is a monthly publication of the Ford Amateur Astronomy Club, an affiliate club of the Ford Employee Recreation Association.

Ford Amateur Astronomy Club
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Dearborn MI 48121-7527

Your submissions to STAR STUFF are welcome. Please write to the address above or contact the editor...

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Officers:

President	Dan Kmiecik
Vice President	Don Thompson
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General Meetings:

The Ford Amateur Astronomy Club holds regular general meetings on the fourth Thursday of each month (except the combined November/December meeting held the first Thursday of December) at 5:00 PM in conference room 1491 in the Ford Credit building in Dearborn, Michigan.

Observing:

The Ford Amateur Astronomy Club observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains a permit for after-hours access. Weather permitting, the club observes on Friday nights, Saturday nights, and nights before holidays.

Hotline:

Observing schedules and additional club information is available by calling the Observing Hotline at (313) 390-5456.

Club Membership:

Membership in the Ford Amateur Astronomy Club is open to Ford employees and non-employees. Write or call for an application.

Annual -- New: \$ 25 - Renewal: \$ 20
Lifetime -- \$ 100

Membership includes a subscription to the STAR STUFF newsletter, discounts on ASTRONOMY and SKY & TELESCOPE magazines, after-hours access to the

observing site, and discounts at selected area equipment retailers.

One of the very nice things about the observing stories is that "Scotty" is meticulous about qualifying his observations with the observing instrument and the sky conditions. I am left with the feeling that using this work as a guide I could make these same expert observations. Most of the observations are made with fairly modest equipment (of course, his 4" refractor is a Clark).

"Scotty" also includes observing reports from his readers and the variety adds to the choices of objects and equipment. Reading this work has been a wonderful experience and I am left wishing I had been able to read and enjoy these columns as they were originally published over the years. Those of you that have read some or all of these in the pages of Sky and Telescope will appreciate this compilation, those, like me, who have not read any of the original columns are in for a feast of knowledge! A real winner!

Apollo Rendezvous 2000

By Al Bates

I had a chance to venture to the Apollo Rendezvous 2000, held at the Boonshoft Museum of Discovery in Dayton, Ohio, Saturday, June 10th. [www address \(http://www.mvas.org\)](http://www.mvas.org)

The theme this year was Human Space Exploration and Colonization in the Next Century. It is a daunting challenge, and one many believe is essential for the future of our species.

The three speakers at this Annual Telescope Fair was worth the trip. Dr. Story Musgrave, a 30 year astronaut spoke of the human issues of manned space flight, including the implications of a long-duration exploratory trip to Mars.

(<http://www.spacestory.com>) Exploring space from the astronaut's perspective was very interesting. Dr. Story was the photographer, physician, and a member of the Hubble space telescope repair team. He explained in detail what had to be done on the mission to bring the HST back into operation. He spoke of his personal experience of how he almost lost his fingers from frost bit while working on the Hubble because some of the tools wouldn't work and he refuse to abort the mission. He

understood how important the HST is to astronomers. His slide presentation of space was breathtaking. I lack the words to describe the thrill of seeing his personal collection of slides that he shared with us.

Former Lockheed-Martin scientist, Dr. Robert Zubrin, President of the Mars Society, and author of The Case for Mars, and Entering Space: Creating a Space faring Civilization, spoke from an engineering perspective traveling to and from Mar and colonize the red plant. I found his theory of terraforming Mars quite interesting. (<http://www.marssociety.org>)

Dr. Athena Andreadis, the author of: To Seek Out New Life: The biology of Star Track, spoke of the long-term biological and genetic implications of human colonization of Mars and elsewhere along with issues relevant to future human solar system colonization and well as search for extraterrestrial life.

After closing there was observing at the John Bryan State park Observatory. This observatory used to be operated by the army. It's about 35 minutes from Boonshoft Museum of Discovery near Yellow Springs. The speakers were there. It was a net time to ask question. The MVAS (Miami Valley Astronomical Society) use and take care of the observatory now.

Heard On The Net

from the sci.astro.amateur newsgroup
by Bob Lambeck

Fred Block, about to embark on a quest for the Holy Grail (oops! actually a new telescope), posted the following. By the way, Fred has a really neat astronomy related website at <http://www.monmouth.com/~fblock/astro.htm>.

Hear Ye Hear Ye!! Gather round to hear the tale of the new beast that roams our countryside!!

I am to tell you a tale of my adventures in Astronomy and the never ending quest to get more light! My friends, I currently own a 10" Discovery Dob Pet. I admit that it has treated me well and is a faithful companion but alas, I have looked through the eyes of

larger beasts! Fear not as I drift deeper into my tale.....

The crier has come to my small town and has announced to us all the coming of a new beast of the Truss type. Yes there are many races and breeds of this fearful monster. You may all be aware of the ones from the land of Obsession and the ones from the Kingdom of Starmaster. There are even those from the far away country called Tectron.

I have seen the Obsession Truss Monster and recall the view through its wide 18" throat. The ghastly visions will stay with me forever! I have also had the chance to peruse the heavens with the 14.5" Starmaster Truss Monster and know that it too has amazing vision of the heavens. Although these monsters may seem docile to those of you that have not met one yet, beware, for they have a nasty bite and will most certainly leave you scarred forever!!!! You have been forewarned.....

The newest breed of Truss Monsters comes from the land of Discovery and have been recorded in sizes up to 17.5"!!! I have seen

paintings on the walls of this new beast but have yet to see one up close! The walls tell the story of this new Truss Monster yet the story sounds so familiar to me. After seeing the other beasts this one seems to be in the same family as the others but has differences that set itself apart from rest of them. These differences seem to be small but alas, differences they are!

My noble people, I am a hard working peasant and desire the company of one of these Truss Monsters, preferably the 17.5", but I also value the gold that I slave for very dearly. Rather than wait, my sack of gold would allow me to purchase the 17.5" Discovery Truss Monster by the light of the next full moon. This would mean my new pet would arrive in time for the 31st anniversary of my birth in the 6th month of the year 2000. It seems to me that some of those in the village that I live in would not pay the higher price for the Truss Monsters from Obsession or Tectron or even Starmaster but there are those that stand firm by their beasts and say that "there is no other". I am painfully torn but would love to be one of the first countrymen to own one of these noble beasts....

Shall I be swayed down the path of the expensive Truss Monsters and wait many a fortnight to purchase one of the familiar beasts or get the one from the land of Discovery, the newcomer to our lands, as soon as the magics of delivery allow?

A difficult decision it tis but I admit that I currently live in the land of Discovery and have marveled in it's visions and would be more than happy to remain a noble servant to my Kings Terry and Bill. They rule our lands with knowledge, support and comfort and make me feel that my purchases from them are well earned.

It is for this reason that I call an immediate meeting at the round table to discuss such issues of the new Discovery Truss Monster and come to some conclusion.

I beg for your needed assistance.....My fate lies in your hands....

Stay tuned next month for part two!

Basic Solar Observing Tips By Greg Burnett

Excluding specialized telescopes like coronagraphs, there are basically two methods for safely observing the sun: projection and front aperture filtration. Both of these methods are adaptable to most amateur telescopes. Projection involves arranging a projection screen of some sort, a stiff piece of white cardboard for example, at a suitable distance behind the eyepiece. The solar image is then focussed on the screen through the eyepiece. Commercially made mounting brackets are available for this purpose, or they can be homemade. The projection method has the advantage of being relatively inexpensive. It has the disadvantage that fine detail is often difficult to see in a projected image. Also, the full energy from the sun passes through the telescope optics. This can cause heating, particularly in the eyepiece, where cemented lens elements could be damaged. For this reason it is best to use a simple eyepiece for solar projection, like a Huygens or Ramsden type.

Front aperture filtration is accomplished by covering the main objective aperture of the telescope with a filter specially made for solar observing. Such filters may be made of glass or Mylar plastic. Both types rely on a thin coating of metal, usually an alloy of aluminum, to provide the proper filtration. These filters are designed to eliminate all of the ultra-violet and infra-red radiation from the sun, and to admit only about a **thousandth of a percent** of the visible light. An advantage of front filtration is that the operation of the telescope is essentially unaffected. That is, different eyepieces, diagonals, etc. can still be used as usual. Also, the full energy of the sun is kept out of the telescope. The disadvantages are that front filters, particularly glass ones, are somewhat expensive, and they require a certain amount of care.

Another style of solar filter deserves mention because it is not considered safe. Solar filters that attach to the eyepiece are often supplied with "department store" telescopes. These small filters absorb all of the solar energy collected by the telescope objective. They become very hot in just a few minutes and have been known to fracture if over-heated. This could have disastrous consequences for an observer using the telescope at the moment of failure. For a few dollars more, it is better to be safe than sorry.

2000 Ford Amateur Astronomy Club Calendar

FAAC, P.O. Box 7527, Dearborn, MI 48121-7527

(upcoming events are underlined)

Jun 30 thru NCO Boon Hill Star Party – Boon, West of Cadillac – BYO Everything
Jul 5

Jul 1 Lake Hudson Dark Sky Stargaze

Jul 8 FAAC Beginner's Night

Jul 27 FAAC General Membership Meeting

Jul 29 Lake Hudson Dark Sky Stargaze

Aug 24 FAAC General Membership Meeting

Aug 26 Lake Hudson Dark Sky Stargaze

Sep 23 thru NCO Boon Hill Fall Star Party – Boon, West of Cadillac – BYO Everything
Oct 1

Sep 28 FAAC General Membership Meeting

Sep 30 Lake Hudson Dark Sky Stargaze

Oct 7 Eighth Annual Island Lake Star Party

Oct 26 FAAC General Membership Meeting

Oct 27 thru 30 NCO Boon Hill Star Party – Boon, West of Cadillac – BYO Everything

Oct 28 Lake Hudson Dark Sky Stargaze

Nov 25 Lake Hudson Dark Sky Stargaze

Dec 7 FAAC Joint November/December General Membership Meeting

Dec 23 Lake Hudson Dark Sky Stargaze

Check for updates on the FAAC hotline: 313-390-5456

Ford Intranet: <http://www.be.ford.com/astro/faac.html> or the External Internet:

<http://kode.net/~dougbock/faac/>

Ford Amateur Astronomy Club

Beginners' Night at Island Lake

July 8th, from 7:00PM to Midnight
(Arriving at 7PM will allow you to get help during daylight)

Do you have a new telescope that you would like to learn to use? Do you want to see samples of what the night sky has to offer? (weather permitting)

You should consider coming out to Island Lake Recreation Area on Beginner's Night. These nights are dedicated to providing equipment and observing assistance to new astronomers

The event will take place on the date indicated regardless of sky conditions, cloudy or clear. If it is raining, the event will be cancelled.

The exact location of the observing site is the "Spring Mill Pond" parking lot and picnic area, at the Island Lake State Recreation Area, on Kensington Road, south of I-96 between South Lyon and Brighton.

For more info or details on this event, contact John at Pattern120@hotmail.com or Dan at FAAC1992@hotmail.com

The Ford Amateur Astronomy Club observes at the Island Lake site on Friday and Saturday evenings year round, provided skies are clear. You are welcome to visit the observing site on any weekend, but you must be with a club member if you plan to observe after 10PM. Call 1-313-390-5456 to find out if anyone is going out on any particular night.

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