

Parks 6 " Tube Assembly

by Peter Besenbruch

I have noticed over the years that my telescopes tended to match the car I was driving. When I drove a Tercel wagon I squeezed an 8", f7.5 Newtonian in there. When I drove a Taurus wagon, the scope grew to 10". Now that I drive a Prius, the 10" no longer fits. That's why I bought a Parks 6", f6 Newtonian.

Why that size? I remember attending a moderated talk at Riverside a number of years back, featuring various amateur telescope makers, as well as the owners of small companies that favored large Dobsonians. Much of the talking centered on large Dobsonians and how to make them usable. At the end of the discussion, I asked which scope each of the speakers used the most for their own viewing. All answered a 6", f6 Newtonian. Then, they and the audience laughed. All gave similar reasons: The scope represented a sweet spot of power and ease of use. Make it shorter, and eyepieces struggle more with the shorter focal ratio. Coma also becomes a

(Continued on page 9)

Upcoming Star Parties

Club Party	Aug 30	Dillingham
Public Party	Sep 6	Kahala/Waikele
Public Party	Sep 20	Dillingham
Club Party	Sep 27	Dillingham
Public Party	Oct 4	Kahala/Waikele

Inside this issue:

President's Message	2
Club Information	2
Minutes	3
NASA Space Place	5
Observer's Notebook	6
Meteor Log	7
Minor Planet Report	7
Calendar	8
Kauai Reminder	10
Classifieds	11

Upcoming Events:

- The next meeting is at 7:30 p.m. on **Tuesday, Sep 2nd** at the Bishop Museum.
- Bishop Museum's next planetarium show with **Barry Peckham** is Friday, **Sep 5th** at 7:00 p.m.
www.bishopmuseum.org/calendar
- The next Board Meeting is Sunday **Aug 31st** at 3:30 p.m. at the POST building at UH.

President's Message

A few months ago, the HAS received as a donation a NexStar 8 “go-to” telescope. Many novice astronomers are attracted to this type of telescope, and we wanted to get to know one in order to better advise those who think they might want to buy one, so some of us are learning how to use it. I have used it a few times now, and here are my impressions.

First, the optics are good. A few weeks ago at Dillingham Airfield, we had very good seeing for a while, and Jupiter looked outstanding on every ‘scope I looked through, the NexStar included. However, most other aspects of using this instrument have their problems.

The mechanical set-up of the scope is fairly easy, but a built-in level would have been nice. There are two methods for setting up the “go-to” capability. One uses two stars of the user’s choice, suitably separated on the sky, to be centered in the eyepiece and then entered with the control panel. The other method requires entering latitude and longitude, aiming the telescope roughly north, then letting the telescope slew to its selected two target stars. These will often be the two you would have chosen.

Once set up, the telescope was usually able to put selected objects into at least a low-power eyepiece’s field of view, often into a higher power view as well. There are several ways to choose a target. Many novices would use the “tour” option that offers a number of types of object in the sky during the chosen month. Of course, some are below the horizon at a given time, and the control panel will indicate this if one is selected.

Unfortunately, the mount is not very steady. It wouldn’t be good in windy conditions. Peter Besenbruch loaned me a set of vibration pads for the tripod, and that seemed to reduce the damping time

(Continued on page 4)

Hawaiian Astronomical Society

P.O. Box 17671
Honolulu, Hawaii 96817

President

Chris Peterson

956-3131

chrisp@higp.hawaii.edu

Vice President

Barry Peckham

542-8658

barry@liteboxtelescopes.com

Secretary

Gretchen West

737-4742

gwest002@hawaii.rr.com

Treasurer

Jim MacDonald

261-2162

jim.macd@hawaiiantel.net

The **Astronomer** Editor

Carey Johnson

216-1410

quarkcsj@hotmail.com

Board Members-at-Large

John Gallagher 683-0118

gallaghej002@hawaii.rr.com

Harry Zisko 262-1947

harryz@pobox.com

HAS Webmaster

Peter Besenbruch

prb@lava.net

School Star Party Coordinator

Forrest Luke

lukef003@hawaii.rr.com

The **Astronomer** is the monthly newsletter of the Hawaiian Astronomical Society. Some of the contents may be copyrighted. We request that authors and artists be given credit for their work. Contributions are welcome. Send them to the Editor via e-mail. The deadline is the 16th of each month. We are not responsible for unsolicited artwork.

President Chris Peterson called the August 5, 2008 meeting of the Hawaiian Astronomical Society to order at 7:40 p.m. The meeting was held at the Atherton Halau on the grounds of the Bishop Museum. There were twenty-five members in attendance. There were no visitors at this month's meeting.

Hawaii Space Lecture Series: There is no scheduled lecture for Hawaii Space Lecture Series for the month of August, however in the month of September Paul Able may speak on possible human missions to near Earth asteroids. Lectures for the Series usually take place at 7:30 pm in the NASA Pacific Regional Planetary Data Center, room 544, on the fifth floor of the P.O.S.T. Building at the University of Hawaii at Manoa. For further information you can contact NASA PRPDC at 808-056-3132 or on the Web go to <http://www.higp.hawaii.edu/prpdc>.

Greetings: Former member Don Tucker (2001) bids friends hello from Heidelberg Germany where he is currently assigned. Don reconnects with us via the yahoo chat group. Member Mike Linnolt bids all of his friends aloha. He has relocated to western Nevada and reports that the skies are beautiful.

Upcoming Event: This year's Lacy Veach Day will take place Saturday, October 25th at Punahou School in Manoa from 8:00 am to 2:00 pm. This science event for students, their parents and educators is a yearly event that celebrates the life of the late Hawaii born U.S. astronaut Lacy Veach. Gretchen West is looking for HAS members to help out in manning a display table at the event. Pleased contact Gretchen if you are interested in representing the club for a 2-hour shift.

Club NexStar8: Board members are currently working to learn the ins-and-outs of the donated scope. The scope would profit from a set of vibration pads to dampen down movement caused by wind and the occasional bump. Chris Peterson and John Gallagher report that the optics are quite good, however they both see that there is some problem with backlash associated with slewing.

School Star Party Report: Forrest Luke reports a star party will take place at Mililani Uka on September 5. He asked for and got members to sign up to help at the star party. Forrest reports that Mililani Uka would like to have a member lecture for approximately twenty minutes as well. In the month of October we will hold a star party for Pearl Harbor Elementary.

Come Out To A Star Party: We invite all members to come out and enjoy our Hawaiian skies at our public star parties at Dillingham Air Field and at Kahala and Waikele Community Parks.

Video Presentation: President Chris Peterson presented a review of the Hawaii Science Lecture Series lecture he gave with Dr. B. Ray Hawke titled "Fly Over the Moon with Kaguya." Chris' presentation featured high definition images of the Moon and structural details. Members took a visual trip to various areas of interest on the sunlit and dark sides of the moon. High

(Continued on page 4)

definition offered viewers excellent vistas of the Earth not usually available to the public as well as minute detail. In addition, HAS members viewed a short video, in infrared and visible light, of the Moon's transit of the Earth as seen from the Deep Impact space vehicle. Chris thanked HAS member Steve Chun for the use of his High Definition viewer for the evenings video presentation.

Kauai Trip Reminder: Vice President Barry Peckham reminded members in attendance that the Kauai astronomical group is hosting members from HAS on Kauai in September. Although this is not a club sponsored trip, Barry hopes that members will join him and other HAS members on the weekend of September 27th.

Never Too Old To Learn! - Barry spoke briefly about the monthly Bishop Museum Planetarium "The Sky Tonight" shows. Barry hosts the show and reminded HAS members that as sidewalk astronomers we are always expected to know useful bits of information. Searching for these tidbits of information makes us more informed and makes our job a bit more fun. During this past "The Sky Tonight" show, Barry passed on nuggets of information about an old viewing favorite, Alberio, in the constellation of Cygnus, which he also shared with all of us at this month's meeting. Barry urges us all to be active learners and to keep looking for new information to enhance our conversations with the public as we show them the beautiful skies over Hawaii, or anywhere else we may be viewing.

Teleconference: NASA Night Sky coordinator John Gallagher informed members of an upcoming web conference during which astronomer Lucy McFadden will discuss meteorite research in the Antarctic.

Eclipse Info: John Gallagher also reminded members about the availability of information on the recent solar eclipse as seen in China. Downloads of video are available at www.exploratorium.edu/eclipse/2008. John warns that there are three different versions and that some download times are long.

Perseid Meteor Shower: The early morning hours of August 12 should be the best time to view the Perseid Meteor Showers. A dark viewing area looking south should be best.

As there was no further business, the meeting was adjourned at 9:12 p.m. Refreshments were served.

Respectfully Submitted,
Gretchen West, HAS Secretary

(Continued from page 2)

considerably. Also, a bump to the tripod can lose the alignment settings, requiring another set-up. Also, the eyepiece is set so close to the back of the telescope that it is quite easy to bump the 'scope while viewing.

This is not a telescope I would buy, but used wisely it could help a user learn the locations of objects in the night sky more quickly.

Chris



A Google for Satellites: Sensor Web 2.0

If you could see every satellite passing overhead each day, it would look like a chaotic meteor shower in slow motion.

Hundreds of satellites now swarm over the Earth in a spherical shell of high technology. Many of these satellites gaze at the planet's surface, gathering torrents of scientific data using a dizzying array of advanced sensors — an extraordinary record of our dynamic planet.

To help people tap into this resource, NASA researchers such as Daniel Mandl are developing a “Google for satellites,” a web portal that would make requesting data from Earth-observing satellites almost as easy as typing a search into Google.

“You just click on it and it takes care of all the details for you across many sensors,” Mandl explains.

Currently, most satellites are each controlled separately from the others, each one dauntingly complex to use. But starting with NASA's Earth Observing-1 (EO-1) satellite, part of the agency's New Millennium Program, Mandl and his team are building a prototype that stitches these satellites together into a seamless, easy-to-use network called “Sensor Web 2.0.”

The vision is to simply enter a location anywhere on Earth into the website's search field along with the desired information types — wildfire maps, vegetation types, floodwater salinity, oil spill extent — and software written by the team goes to work.

“Not only will it find the best sensor, but with proper access rights, you could actually trigger a satellite to take an image in the area of interest,” Mandl says. Within hours, the software will send messages to satellites instructing them to gather the needed data, and then download and crunch that raw data to produce easy-to-read maps.

For example, during the recent crisis in Myanmar (Burma) caused by Cyclone Nargis, an experimental gathering of data was triggered through Sensor Web 2.0 using a variety of NASA satellites including EO-1. “One thing we might wish to map is the salinity of flood waters in order to help rescue workers plan their relief efforts,” Mandl says. If the floodwater in an area was salty, aid workers would need to bring in bottled water, but if flood water was fresh, water purifiers would suffice. An early and correct decision could save lives.

Thus far, Mandl and his team have expanded Sensor Web 2.0 beyond EO-1 to include three other satellites and an unmanned aircraft. He hopes to double the number of satellites in the network every 18 months, eventually weaving the jumble of satellites circling overhead into a web of sensors with unprecedented power to observe and understand our ever-changing planet.

To learn more about the EO-1 sensor web initiatives, go to <http://eo1.gsfc.nasa.gov/new/extended/sensorWeb/sensorWeb.html>.

Kids (and grown-ups) can get an idea of the resolution of EO-1's Hyperion Imager and how it can distinguish among species of trees—from space at http://spaceplace.nasa.gov/en/kids/eo1_1.shtml.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Planets Close To the Moon










Times are Hawaii Standard Time

- Sep 1, 06h, M 4.7° SSW of Venus
(23° from sun in evening sky)
- Sep 1, 11h, M 2.6° SSW of Mercury
(25° from sun in evening sky)
- Sep 1, 17h, M 4.5° SSW of Mars
(29° from sun in evening sky)
- Sep 9, 11h, M 2.7° S of Jupiter
(115° from sun in evening sky)
- Sep 12, 15h, M 0.71° N of Neptune
(151° from sun in evening sky)
- Sep 14, 20h, M 3.6° NNW of Uranus
(177° from sun in midnight sky)
- Sep 27, 06h, M 4.0° SSW of Saturn
(20° from sun in morning sky)
- Sep 30, 14h, M 5.0° NNW of Mars
(20° from sun in evening sky)

Other Events of Interest

Times are Hawaii Standard Time

- Sep 3, 15h, Saturn in conjunction with sun
(Passes into morning sky)
- Sep 6, 18h, Mercury 2.5° SW of Mars
(27° from sun in the evening sky)
- Sep 10 18h, Mercury at greatest elongation
(26.9° east of the sun in evening sky)
- Sep 11, 16h, Venus 0.30° NNE of Mars
(26° from sun in the evening sky)
- Sep 12, 26h, Uranus at opposition
- Sep 14, 23:14h, Moon Full
- Sep 22, 05:44, Fall or Autumn equinox
- Sep 28, 22:12h, Moon New

<p> Mercury is visible in the evening sky during the first couple of weeks of September.</p>	<p> Venus is low in the west after sunset. It has a very close conjunction with Mars on Sep 11.</p>	<p> Mars is still low in the south-west after sunset.</p>
<p> Jupiter is still well placed for viewing this month and is in the sky until after midnight.</p>	<p> Saturn reaches conjunction with the sun this month and is lost in the glare of twilight.</p>	<p> Uranus reaches opposition this month and is in the sky all night, best viewed in late evening</p>
<p> Neptune is west of Uranus and is well positioned for viewing in the evening hours.</p>	<p> Dwarf Planet Pluto is still well placed for observing or imaging in September near Jupiter.</p>	<p> Asteroid (4) Vesta is visible in the east about midnight in September and is the brightest asteroid at about magnitude 6.5.</p>

The year's best sporadic rates occur this month along with a few minor showers.

Tuesday the 9th, September Perseids. Radiant 04h00m +47 deg. This very minor shower is active from about the 5th through the 17th. The Moon will set about the time the radiant rises which is about 11Pm to midnight. The shower rates are less than 5 meteors an hour. Meteor are normally swift and generally quite faint.

Sunday the 28th, Delta Aurigids. Radiant 05h28m +49 deg. Rates are only a few an hour most likely less than 3. The maximum is ill-defined and may last from about 9/18 through 10/10. The date given is the midpoint or the interval. New Moon means coverage of most of the period will be practical.

If you are interested in observing meteors contact Tom Giguere at 672-6677 or write Mike Morrow, P. O. Boxz 6692, Ocean View, Hawaii 96737

Minor Planet Report - Sept. 2008 by Carey Johnson

Comet Events

- 9/4 C/2008 A1 (McNaught) 1.325 AU from Earth, Mag. 9.5
- 9/7 67P/Churyumov-Gerasimenko 1.395 AU from Earth, Mag. 15.9
- 9/11 7P/Pons-Winnecke Perihelion 1.253 AU, Mag. 16.96
- 9/29 C/2008 A1 Perihelion 1.073 AU, Mag. 9.5

Asteroid Events

- 9/1 1998 SD9 0.024 AU from Earth, Mag. 17
- 9/5 (43) Ariadne at opposition, Mag. 9.8
- 9/7 2003 WT153 0.0149 AU from Earth, Mag. 23
- 9/19 2003 SW130 0.022 AU from Earth, Mag. 23

	Magnitude			Magnitude	
Comets	Sep 1	Sep 30	Asteroids	Sep 1	Sep 30
C/2008 A1 (McNaught)	7.8	7.7	(4) Vesta	7.0	6.5
19P/Borrelly	10.0	11.0	(1) Ceres	8.3	8.2
C/2007 W1 (Boattini)	10.3	12.0	(2) Pallas	8.5	8.0
6P/d'Arrest	11.1	13.0	(11) Parthenope	9.0	9.6
C/2006 OF2 (Broughton)	11.2	11.0	(9) Metis	9.4	8.8
C/2007 N3 (Lulin)	11.3	11.1	(43) Ariadne	9.5	9.9
85P/Boethin	11.6	10.2	(216) Kleopatra	9.9	9.8
C/2007 G1 (LINEAR)	12.1	12.3	(130) Elektra	10.3	10.5
C/2006 Q1 (McNaught)	12.3	12.6	(79) Eurynome	10.3	10.6
7P/Pons-Winnecke	12.8	12.6	(3) Juno	10.5	10.7
C/2007 B2 (Skiff)	13.5	13.7	(306) Unitas	10.6	11.1
C/2008 J1 (Boattini)	13.9	14.3	(27) Euterpe	10.7	10.4
C/2006 W3 (Christensen)	14.4	14.0	(29) Amphitrite	10.7	10.7
15P/Finlay	14.7	11.1	(17) Thetis	10.7	11.2

See <http://www.geocities.com/quarkcsj/calendar.html> for more up to date info.



Welcome, **quarkcsj**
[Sign Out, My Account]

September 2008

Print

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31 [Add] 3:30p HAS Board Meeting	1 [Add] 25-6 Alpha Aurigids (AUR) Asteroid 1998 SD9 Near-Earth Flyby (0.024 AU) M 17	2 [Add] 7:30p HAS Meeting	3 [Add]	4 [Add] Comet C/2008 A1 (McNaught) Closest Approach To Earth (1.325 AU) M 8	5 [Add] Asteroid 43 Ariadne At Opposition (9.8 Magnitude)	6 [Add] 6:30p Kahala & Waialeale Public Star Parties
7 [Add] 1-14 Gamma Aquarids Asteroid 2003 WT153 Near-Earth Flyby (0.0149 AU / 5.8 LD) M 23 Comet 67P/Churyumov-Gerasimenko Closest Approach To Earth (1.395 AU) M 15.9*	8 [Add]	9 [Add]	10 [Add]	11 [Add] 5-15 Alpha Triangulids Comet 7P/Pons-Winnecke Perihelion (1.253 AU) M 16.96 Mercury At Its Greatest Eastern Elongation (27 Degrees)	12 [Add] 28-23 Eta Draconids	13 [Add] Uranus At Opposition
14 [Add]	15 [Add] Full Moon	16 [Add]	17 [Add]	18 [Add]	19 [Add] Asteroid 2003 SW130 Near-Earth Flyby (0.0220 AU) M 23	20 [Add] 6:30p Dillingham Public Star Party
21 [Add]	22 [Add] Autumnal Equinox, 15:44 UT	23 [Add] 26-22 Gamma Piscids	24 [Add] For more events look here.	25 [Add]	26 [Add]	27 [Add] 6:30p Club Star Party
28 [Add]	29 [Add] New Moon Comet C/2008 A1 (McNaught) Perihelion (1.041 AU) M 7.9	30 [Add]	1 [Add] 20-2 Eta Cetids	2 [Add] Asteroid 2002 GM5 Near-Earth Flyby (0.011 AU) M 14	3 [Add]	4 [Add] 22-11 October Cygnids 4-10 World Space Week 6:30p Kahala & Waialeale Public Star Parties

(Continued from page 1)

factor. Make it wider and/or longer, and the scope loses portability. Make it smaller, and you lose significant planetary and deepsky capability.

Why Parks? The September Sky and Telescope has a review of the Orion 6", f5 StarBlast. It comes with two decent eyepieces, a nice, working finder, and a decent modified Dobsonian mount, all for the low price of \$250. The Parks 6", f6 tube assembly comes with one slightly worse eyepiece, and a 6x30 finder for about \$700. Want an alt-azimuth mount? That's brings the total to \$900 and about 15 pounds extra. I already had a perfectly decent equatorial mount, so I bought just the tube assembly. Still, the question remains: Why Parks?

The Parks tube assembly comes with rubber end caps. Plastic end rings trim a white, fiberglass tube (compared to the Orion's steel tube). I have worked with Parks tubes for years, and can say there is nothing better out there. Aside from their strength, they are easy to work with (they drill nicely), and have the best interior blackening of any tube made. Orion uses a more substantial end ring in front and a wrap-around primary mirror holder in back to stabilize the seamed, steel tube.

Inside, the Parks primary mirror cell (made of nylon) holds the primary by means of glue (probably silicon). Parks must be confident of the process, as they ship the scope with the primary already mounted. You would not do that with a mirror cell that uses retaining clips. One good drop and the mirror will chip (like my older 6" f5 did). The nylon cell does its job in other ways, too. I usually do not need to collimate before viewing. Orion uses a primary cell that holds the edge of the mirror. Much like my daughter's XT4.5. Technically, that's a no-no, as the mirror might sag when pointed straight up. The full thickness mirror Orion uses should minimize that, however.

On the other end, Parks hangs a 1.5" secondary holder from a four vaned spider. I usually disassemble front units on Newtonians I buy, or make, to shim the secondary stalk so that it doesn't wobble in its holder. Parks did something different. They used rubber O rings to eliminate the play of the secondary in the spider. No disassembly required. The Orion secondary appears to use thicker threaded bars for its spider material. This results in brighter diffraction spikes when looking at bright objects. The secondary holder itself is undersized, meaning that the mirror is glued to the outside of the secondary holder.

Parks supplies a 6x30 finder that slides into two rings bolted to the tube. No dovetails, no quick releases, but they do give you the most idiotic mounting position possible, well behind the focuser. This makes the finder almost impossible to use. The Orion, non-magnifying EZ Finder is a better idea. I swapped the eyepiece Parks provided for a Telrad.

The Parks focuser is a stock 1.25", rack and pinion unit, or more accurately, a stock unit from the 1960s. It is all steel, aluminum, and brass, with no play of any kind. Even at its loosest setting (the focuser doesn't really have a loose setting), the thing won't creep, flex, or do other undesirable stuff. It takes any eyepiece you can throw at it, and handles it smoothly. The Orion's focuser is made of plastic, which probably limits its weight bearing credentials, and its longevity.

How about the optics? I have enjoyed views through many cheap Dobsonians graced with Chinese mirrors. Sometimes you get a good one. Orion simply claims the StarBlast's plate glass mirror is diffraction limited. I would use a different word: Usable. At that price, no-one can spend the time figuring and polishing a mirror to high standards. Computers do let you get a workable figure with minimal effort. What you hope for is a mirror free of gross errors, and which isn't too rough.

What did I get with the Parks Pyrex mirror? Only the best star test I have ever seen. I have had good scopes, but none with star test rings that smooth or even. Never have I had the inside of focus match the outside so perfectly. Stars are little steel points. Jupiter shows a mottled south polar region, while a wealth of detail graces the equatorial regions. Maybe I got lucky, but I suspect Parks' mirrors overall are better than Orion's. At that price, they had better be.

Why Parks? It's a better telescope, that's why. I justify the extra expense, because this one is my primary scope, the one I haul around to star parties. Gary Seronik, the author of the Sky and Telescope article basically says the StarBlast works as a scope for beginners, and as a portable, second scope for the rest of us. While I think that f5 is too short an f ratio for beginners, I largely agree with his conclusions. Gary, by the way, made a name for himself in the 1990s, championing long focus Newtonians as a cheap alternative to high end refractors. He played with scopes ranging from f9 to f12, all with microscopically sized secondary mirrors. He was also one of the panel members who admitted to using a 6", f6.



Kauai Reminder

Those of us who love darkness will travel to Kauai for the KEASA public star party on September 27th. It is a traditionally dry time of year and features the Summer Milky Way at the zenith early in the evening. We've met good people over on Kauai's south side. Find out for yourself why astronomy is a traveler's treasure. You will be living the dream of thousands of mainland stargazers at a fraction of what they'd have to pay. My 15 incher is flyin' over. How about yours?

More than a decade ago, our club mustered 10 members who were willing to spend 2 dark nights on Molokai's south shore. We brought over the club's own 18 incher plus several other scopes and divided our numbers between 2 B&Bs. In the month of August we had some cloud troubles on the second night and relocated to a rise farther from the wet East End. For celestial inspectors like us the excitement increases with darkness. Nothing makes your equipment perform better than the absence of light pollution. The neighbor islands still have places where that absence can be savored. Can you find them on your own?

Barry Peckham

Upcoming School Star Parties

Fri. 9/5 Mililani Uka. *September 5th will start with a spaghetti dinner at 6 P.M. as a fund raiser for students going to Camp Erdman later. If any of our group are willing to participate, I'll get them tickets for the meal.*

Forrest

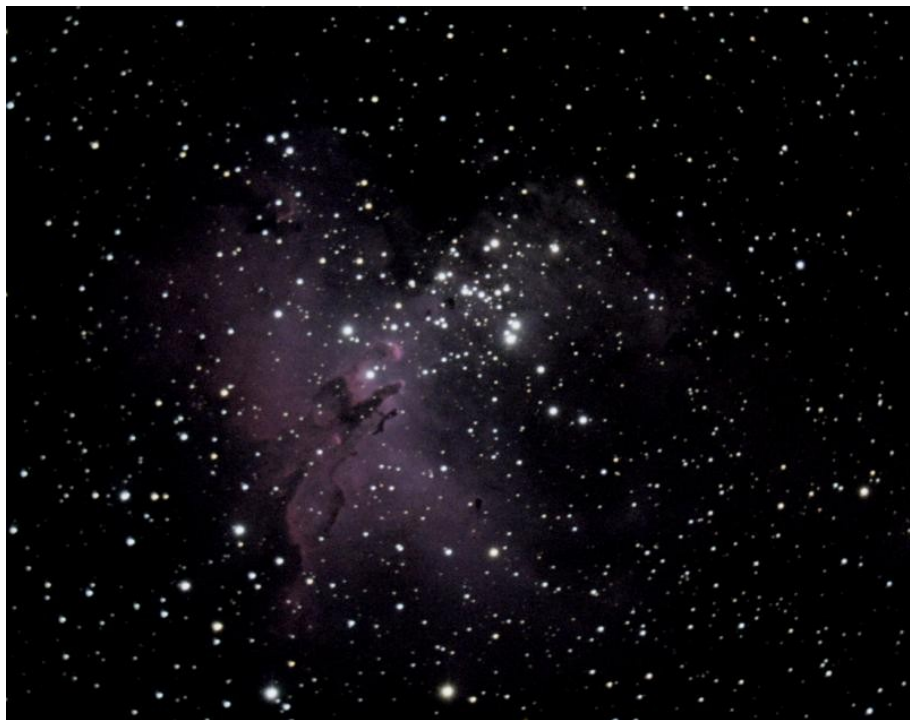
Wed. 11/19 or 20 Camp Erdman for Mililani Uka 5th grade.
Fri. 1/23 Mililani Middle School 6-8 PM for a science night.
Fri. 4/17 Hanahauoli School near Punahou (100 estimated).
Fri. 4/24 Pearl Harbor Elementary (moved from Oct. 08).
Wed. 4/29 Lanakila Elementary.
Thur. 4/30 Ala Wai Elementary.
Fri. 5/1 Mililani Mauka Elementary.

If you are interested in helping out at a School Star Party, sign up on the monthly sheet at the HAS Meeting or contact the Star Party Coordinator: Forrest Luke at 623-9830 or e-mail at lukef003@hawaii.rr.com

Electronic Newsletter

This month's link was posted August 19th at:
http://kilolani.net/astronews/Astronews_2008-09NGC7516.pdf

If you would like to receive the electronic version,
e-mail the Newsletter Editor at quarkcsj@hotmail.com



M16 The Eagle Nebula shot by Freddy Willems Aug. 2, 2008 from the Dillingham Star Party using a Meade 10" on a Losmandy Titan 50 mount and Canon 10D and 6.3 focal reducer. Exposures: 2 X 120 sec. + 30 X 90 sec. ISO 1600, stacked using ImagesPlus, processed in Photoshop. Posted to the HAS Yahoo Group Aug. 3, 2008.

HAS Yahoo Group

<http://tech.groups.yahoo.com/group/HawaiianAstronomicalSociety/>

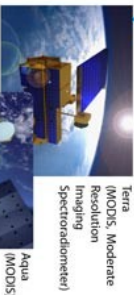
If anyone is interested in helping out at the Stars Above Hawaii program at the Ko Olina Resort, contact Greg McCartney at 291-2464.

For Sale: Celestron C5+ with heavy duty tripod and 2 original eyepieces. This is a vintage '93 five inch SCT on a motorized equatorial wedge with hand controller. In like-new condition, including hard shell case, star diagonal, f/6.3 reducer-corrector. Hardly used. Asking \$925. Call Barry 542-8658.

For Sale, all in very good condition: Celestron Ultima Barlow - \$50, Ultima 23mm wide angle - \$45, Meade 18mm Superwide - \$55, Meade 9.7mm SuperPlossl - \$60, Telrad w/ dewshield - \$40. Call Barry 542-8658.

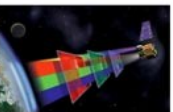
**H.A.S.
P.O. Box 17671
Honolulu, HI 96817**

Map shows locations of wild fires

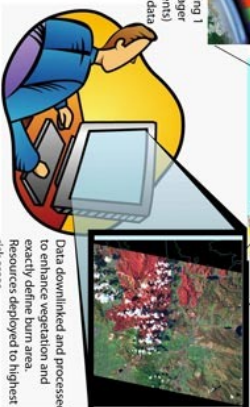


MODIS Active Fire Map

Fire precisely located
using MODIS data



Earth Observing 1
(Advanced Land Imager
and Hyperspectral Instruments)
tasked to acquire image data



Data downlinked and processed
to enhance vegetation and
exactly define burn area.
Resources deployed to highest
risk areas.

A "Google for satellites" type of web portal will allow users to request real-time data from Earth observing satellites.
(See *NASA's Space Place* article on page 5.)

Place stamp
here. Post
Office will not
deliver mail
without proper
postage