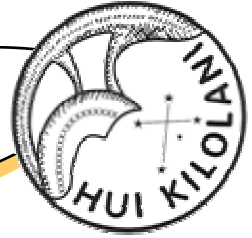


# The Astronews



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January 2003

## Rifle Scope Finders

by Ron Paul Smith

Almost all astronomical telescopes have finder scopes. These are essentially tiny, low power telescopes, attached to the main telescope. Finders are used to locate general areas of interest or particular astronomical objects, so that an observer can more easily find the object or field at high power.

Finder scopes come in various configurations and apertures, such as 6x30mm, or 8x50mm. They generally have wire crosshairs, or a glass reticule with inscribed or painted crosshairs. There are even models with the N.C.P. (North Celestial Pole, or Polaris) indicated, to make true polar alignment easier.

Then there are optical reflex sites,

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## Upcoming Star Parties

<b>Club Party</b>	<b>Dec. 28</b>	<b>Dillingham</b>
<b>Public Party</b>	<b>Jan. 4</b>	<b>Dillingham</b>
<b>Public Party</b>	<b>Jan. 25</b>	<b>Dillingham</b>
<b>Club Party</b>	<b>Feb. 1</b>	<b>Dillingham</b>
<b>Public Party</b>	<b>Feb. 22</b>	<b>Dillingham</b>
<b>Club Party</b>	<b>Mar. 1</b>	<b>Dillingham</b>



## Upcoming Events:

- The next meeting is 7:30 on Jan. 7th at Bishop Museum
- **Sam Rhodes** next Planetarium show on Mon. Jan 6th. Hanauma Bay show will be on Jan. 13th. Gates will close at 6:30 pm.

## President's Message

A new year, 2003! It seems only yesterday we were arguing (ahem, I mean discussing) the true date for the start of the new millennium. Now we're well into the ... what? The zeroes? The oh-ohs? The naughts, the aughts, the 2ks? Nobody seems to have settled on a name for this decade.

Whatever we call it (2k3?), this year we are in for some celestial treats. Saturn and Jupiter are climbing into more favorable viewing position as the year begins. Mars will favor us with a spectacular opposition later in the year. Of course, one of the exciting aspects of astronomy is that we never know when a new comet might turn up or a fireball might blaze across the sky.

We will continue to hold star parties, whatever the outcome of our efforts to tame the lighting at Kahala Community Park and elsewhere. It always seems that there are a few people at each event who are delighted to have their minds expanded by concepts they hadn't spent much time with before, such as the size of the Sun or a nebula, or the speed of light and how we use it to describe distances. It's ironic but beautiful that sometimes you can use a hundred-thousand-light-year distant galaxy to connect with the inside of the head of a person standing right next to you. I wish us all many such moments in the year to come.

**Chris**

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**Planets Close to the Moon**

Times are Hawaii Standard Time









- Jan 3, 14h, M 4.6° S of Mercury  
(15° from sun in evening sky)
- Jan 4, 11h, M 4.6° SSE of Neptune  
(26° from sun in evening sky)
- Jan 5, 18h, M 4.4° SSE of Uranus  
(41° from sun in evening sky)
- Jan 15, 10h, M 2.6° N of Saturn  
(148° from sun in evening sky)
- Jan 19, 06h, M 3.9° NNE of Jupiter  
(164° from sun in midnight sky)
- Jan 27, 05h, M 0.48° SSE of Mars  
(60° from sun in morning sky)
- Jan 28, 09h, M 4.3° S of Venus  
(46° from sun in morning sky)
- Jan 30, 00h, M 4.8° S of Mercury  
(25° from sun in morning sky)

**Other Events of Interest**

Times are Hawaii Standard Time

- Jan 2, 10:24h, New Moon
- Jan 3, 17h, Earth at perihelion  
(Sun-Earth Distance, 0.9833 a.u.)
- Jan 4-5, Saturn passes in front of M1
- Jan 10, 16h, Venus at greatest elongation  
(47° west of sun in morning sky)
- Jan 11, 10h, Mercury at inferior conjunction with sun,  
passes into morning sky.
- Jan 17, 10:48h, Full Moon
- Jan 30, 14h, Neptune in conjunction with sun,  
passes into morning sky.

**The Planets in January**

 <b>Mercury</b> Mercury appears in the evening sky early in Jan and in the morning sky at the end of the month.	 <b>Venus</b> Venus dominates the morning sky, reaching its greatest elongation of 47° on Jan 10.	 <b>Mars</b> Mars is visible in the morning sky, but is still far from the earth and rather dim, Mag 1.4.
 <b>Jupiter</b> Jupiter can be viewed in the eastern sky by mid-evening. Mag, -2.6, Diam, 45"	 <b>Saturn</b> Saturn is near its best viewing position of the year. Mag, -0.3, Diameter, 22".	 <b>Uranus</b> Uranus is very low in the western sky after sunset in Capricornus. Mag +5.7
 <b>Neptune</b> Neptune is too close to the sun to view this month, passing behind the sun on Jan 30.		 <b>Pluto</b> Pluto was at conjunction with the sun in Dec. And is still too close to the sun to view.

**Your Article Here**

Do you miss the 12 page Astronews? Did you ever have a burning desire to be published? Do you enjoy sharing astronomy with others? Now's your chance to kill 3 birds with one stone! All articles gratefully accepted until the 15th of each month.

## School Star Parties

It's that time of year again, and School Star Parties are being coordinated by Forrest Luke. If you are contacted for a school star party, please have the school contact Forrest directly at 623-9830 or <lukef003@hawaii.rr.com>.

As a reminder, upcoming scheduled school star parties are:

- 10 Jan 2003 Kamehameha School (4th grade)**
- 31 Jan 2003 Iroquois Point**
- 6 Feb 2003 Campbell High School**
- 6 Mar 2003 Helemano School (4th grade)**
- 7 Mar 2003 Pearl Harbor Elementary**
- 11 Mar 2003 Ala Wai Elementary**
- 4 Apr 2003 Lanakila Elementary**
- 7 Apr 2003 Voyager School (Kakaako)**
- 25 Apr 2003 Niu Valley Middle School**

If you signed up and need help finding the school, or if you didn't sign up, but still want to participate, please contact Forrest.

## Meeting Minutes

by Chris Trusty

Meeting was called to order at 7:35 p.m. by the president, Gretchen West. There were 39 in attendance. Forrest Luke gave an update on school star parties. Jim MacDonald had samples of the new polo-style shirts with the club logo. Also available are wind breaker jackets and beanies for those chilly evenings.

Elections were held for officers for the year 2003. The slate of candidate presented by the nominations chair were: President: Chris Peterson, Vice President: Barry Peckham, Secretary: Gretchen West, Treasurer: Jim MacDonald, Astronews Editor: Paul Lawler, Member-at-large: Chris Trusty, Member-at-large: Gary Ward. Gretchen solicited additional nominations from the floor. The motion was made by Mel Levin to accept the slate of officers as proposed. It was seconded by John Gallagher. Unanimous vote by the membership to accept the new slate of officers.

Mike Shanahan explained that Bishop Museum will be using the Atherton Halau for dining purposes each evening and would no longer be available for HAS meetings. The planetarium will be used every evening as well and no longer available after our meetings. Bishop Museum has a large meeting room that will hold up to 35 comfortably or the large tent structure near the entrance to Bishop Hall. The membership voted to use the tent, and the January meeting will be held in the tent. The planetarium will be available to us from 4:30pm until 7:30pm. We will explore possibilities of changing the meeting time to facilitate using the planetarium before meetings.

Barry announced that at this time December 14 will be our last public star party at Kahala Park. City and County has not renewed our permit due to our requests to shield their new

*(Continued on page 7)*

In June of 1979, Raymond Ayer – who had been president of the HAS for 6 ½ years in the 1970s resigned because he was moving to the mainland. Bob Terry agreed to serve as president for the rest of the year. In the July, 1979 Astronews he (Bob) wrote about the previous time he had been HAS president. Quoting - “Looking back on some old notes the other day I find that five of us got together in September, 1949 to form the Hawaii Astronomical Society. We met in the park informally for about six months and then started meeting at McKinley High School (and) had an organizational meeting (where) yours truly was elected president.”

Bob Terry’s first term as the president of HAS started over 50 years of service by men and women who have been willing to take the time and put in the effort required to keep the club operating. We owe them a lot. In 1956, when the original group had, essentially, fallen apart - as most of the members had left Hawaii - Earle G. Linsley reorganized the club, saved HAS and became the third president.



Robert (Bob) S. Terry  
1916-1999

Following is a list of the club presidents and their periods of service. As seen above, the club met informally without officers until 1950.

**The HAS Presidents follow:**

Bob Terry .....	1950-1953
David M. Dunn .....	1954-1955
Dr. Earle G. Linsley .....	1957-1959
Perry C. Cornutte .....	1960
Robert Jack.....	Jan. – Oct. 1961
Mike Morrow ...	Nov. 1961-Jun. 1962
George Bunton .....	Jul. – Dec. 1962
Robert Britton .....	1963
Robert Lanterman .....	1964
James Banning .....	1965
Will Kyselka .....	1966
Mike Morrow .....	1967-1968
Sam Fisk.....	1969
Willis Moore .....	1970
George Bunton.....	1971
Raymon Ayer .....	1972
Mike Morrow .....	1973
Raymon Ayer ...	Jan. 1974 - Jun. 1979
Bob Terry .....	Jun.-Dec. 1979
Mike Morrow .....	1880
Ray Fabré .....	1981-May 1987
Bryant Waters ...	Jun. 1987-Dec. 1988
Mike Kaczmarek .....	1991
Phyllis Eide .....	Jan.-Aug. 1992
Mike Morrow .....	Sep.-Dec. 1992
Peter Galloway .....	1993
Ray Fabré .....	1994-1995
Barry Peckham .....	1996
Peter Bessenbruch.....	1997-1998
Cliff Jenkins .....	1999
John Sandor .....	2000
Stephanie Choquette .....	2001
Gretchen West.....	2002

And now, Chris Petersen has been elected as president for 2003. Just a few notes of interest: 1. The person with the longest time of service as HAS president is Ray Fabre’, with a total of 9 years, 5 months. Second longest is Raymon Ayer with a total of 6 years, 6 months. Mike Morrow has been elected president the most different non-consecutive terms – five, first elected in 1961 and last in 1992. The first woman to serve as HAS president was Phyllis Eide in 1992.

HAS Financial Report as of December 15, 2002

Initial Balance:	\$5,746.03
Receipts:	
Dues Received	400.00
Astronomy Payments	232.00
Sky & Telescope Payments	359.40
Shirt Sales	366.00
Donations	70.00
Telescope Rentals	40.00
Total Income:	\$1,467.50
Expenses:	
Astronews	158.81
Magazine Subscription Payment	87.95
P.O. Box Rent	70.00
Total Expenses:	\$316.76
Final Balance:	\$6,896.77

Since last month, we had three new members join HAS. They are **Anna** and **Ira Byerly**, and **Jeff Han**. Welcome to the club!  
*Clear Skies* to all members renewing their memberships this month!

**Rifle Scopes** (Continued from page 1)  
 used as finders. They don't magnify the image (i.e., they are 1x), but rather show the night sky as it is. Usually there is an illuminated red central dot (also known as a "Mars-eye") or a series of concentric rings in the field of view to aid in alignment.

Another concept worth looking at is the adaptation of rifle scopes as finders. I purchased a Bushnell 3x-9x (zoom) rifle scope, with a 32mm objective aperture. It cost no more than a 6x30 finder, yet delivers a vast improvement in features. It is more ruggedly built, is waterproof and fog-proof, has "duplex" (coarse and fine)

crosshairs, has diopter focus to adjust the clarity of the crosshairs to the viewer's eye, and is only lacking a built in illuminator and an objective lens cell-type focus (available on larger aperture more expensive models). Also, as you might expect all rifle scopes have extreme eye relief.

I wrote to Bushnell and suggested that they market the larger aperture objective-focus rifle scope along with a mounting bracket for astronomical use. As I see it, rifle scope finders will eventually become competitive with standard finder scopes. What do you think?

Once again this month's star lore is about two stars, but they are not any kind of double or binary (well, okay, actually, they are both binaries, but not with each other). During this holiday season, what could be more appropriate than a tale of two donkeys by a manger.

Throughout history, many stars, clusters, and of course, the constellations, have been linked with religious figures or events. Asellus Borealis (the northern donkey) and Asellus Australis (the southern donkey) represent two donkeys at a manger. Greeks and Romans saw them as

the asses on which the Gods Dionysus and Silenius rode to battle against the Titans (they won because the braying scared the Titans). Later they were adopted by Christians as donkeys guarding the Christ child. The manger itself (Praesepes, M44) is now more commonly called the "Beehive Cluster." Interestingly, the name Praesepes



means both *hive* and *manger*.

Julius Staal identifies Praesepes with Midas "A story involving the Praesepe relates to King Midas who once wished that everything he touched should turn to gold. His wish

was fulfilled, but he soon realized that he would starve to death because even the food he touched turned to gold. As a warning to others, Midas was later placed in the stars of Praesepe".

It was once thought that this cluster and its two attendant stars could be used to forecast the weather. If you couldn't see Praesepes then it

was going to rain (or was already raining). If you could see  $\gamma$ , but not  $\delta$ , that was a predictor of southerly winds, and if you could see only  $\delta$ , then the wind would soon shift to the northeast. Modern day meteorologists tell us that it's very unlikely that you could see only one of these stars and not the other in the sky.

**Minutes** (Continued from page 4)  
lighting. There will be media in attendance. All members are encouraged to show up and support the club in our efforts to use our public parks for public viewing of the night sky.

Stephanie gave a talk about her recent trip to New Zealand and her experience finding and observing the Magellanic Clouds.

Our guest speaker, Jeff Bell, gave an interesting talk rebutting the existence of a large number of planets that

could support extra-terrestrial life.

Raymond Brust gave a report on the lawsuit file by OHA (Office of Hawaiian Affairs) against the observatories on Mauna Kea. If you have any questions or would like to support UH and its position on Mauna Kea e-mail him at <rwbrustjr@att.net>.

The meeting recessed at 9 pm for refreshments and scope rental. We reconvened in the planetarium for a glimpse of the night sky. Meeting adjourned at 10 pm.

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