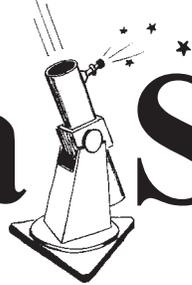


# Sonoma Skies



The Newsletter of the Sonoma County Astronomical Society  
*a non-profit scientific and educational organization*

September 2003

Volume XXVII No. 9

Sept. 10 Meeting:

## New Telescopes and New Developments at the RFO

Mark Hillestad and Larry McCune will speak at the September 10 SCAS General Meeting on "New Telescopes and New Developments at Robert Ferguson Observatory" (RFO).

The most visible changes taking place this year (and in the coming years) are the telescopes. The Dominican 8-inch refractor, the Cook Robotic Telescope, and the new 40-inch telescope being created under the name of Project 40 are the main attractions.

The way the observatory is run will also see some changes, and Mark and Larry will explain how the new Interpretive Concessions and General Plans will make their impacts. Come and hear (and see) what's new at RFO!

Mark is the newly-elected VP of the Valley of The Moon Observatory Association (VMOA) and well-known SCAS telescope painter. Larry is a founding Director of VMOA and noted SCAS pyrophiliac. As most of you know, the VMOA is the all-volunteer docent organization that operates the observatory in Sugarloaf Ridge State Park.

When the RFO opened in 1997, its 40-inch reflector was the largest publicly-accessible visual telescope north of Mount Wilson. Completion of Project 40 will restore this distinction to the RFO. *(as far as your editor has been able to learn; please enlighten him if you know better.)* George Loyer's article announcing Project 40 appeared in the May issue of Sonoma Skies.

## The Great August 2<sup>nd</sup> Star-B-Que

by Len Nelson

What a delightful day on which our Star-B-Que chose to occur! Whereas last year we were enshrouded by fog, this year we had wonderfully clear skies and perfect temperatures.

Larry McCune poured copious quantities of charcoal briquettes into the outdoor grill at the group camp site at 6:00, and by 6:30 the grill was hot. Those lucky souls who attended tossed their entrees onto the iron grill.

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*Blake and Evan Pepper-Tunick atop the west wing viewing ladder at the Ferguson Observatory during the August 2, 2003 SCAS Star-B-Que.*

## SCAS Membership, Renewals and Subscription Information

SCAS new membership dues are \$25 from June 1st through November 30th; and \$12.50 from December 1st through May 31st. SCAS annual renewal membership dues are \$25 per year; due and payable on June 1st each year. Membership is dropped if dues become delinquent.

### SCAS Membership and Meetings

As a benefit of membership, discount subscriptions to *Sky & Telescope* and *Astronomy* magazines are available. Membership meetings take place on the second Wednesday of each month at 7:30 pm in the Multipurpose Room of Proctor Terrace Elementary School on Bryden Lane near Fourth Street in Santa Rosa unless otherwise announced in this publication. Star Parties are meetings held each month at our viewing site on the Saturday evening nearest to the new moon. The Public is invited to both.

**New or renewal subscriptions for *Sky & Telescope*** through SCAS: send your \$29.95 subscription check (**payable to SCAS**) along with your complete mailing address (for new subscriptions) or the *Sky & Telescope* **renewal card** and **return envelope** provided by *Sky & Telescope* (for renewals) directly to **Larry McCune, 544 Thyme Place, San Rafael, CA 94903.**

**Subscriptions to *Astronomy*** through SCAS occur yearly around October. Check *Sonoma Skies* for details.

### Telescopes Available

As a benefit of membership, SCAS members are eligible to borrow telescopes for a \$5 a week donation. Four telescopes are available: a Celestron 8" SCT and a 5" Celestron SCT, complete with clock drive and inverter; an 8-inch Newtonian on Dobsonian mount; and a 80 mm refractor on a motorized equatorial mount. Contact Joan Thornton at 707-762-0594

### Access To Palmieri Observing Site

The Palmieri Observing Site is locked to public access. For use during monthly star parties, SCAS members can obtain the combination to the gate lock to the site by contacting any board member listed to the right.

### Publication

*Sonoma Skies* is the newsletter of the **Sonoma County Astronomical Society** (SCAS) and is published each month. Subscriptions to the newsletter are included as part of membership to the Society.

**Articles, news items and member announcements for *Sonoma Skies* are welcome.** The deadline for articles for October is the 27th of September. Submissions must be typed or, if on computer media, in a commonly used word processing and/or graphics format, and may have graphics (pictures, drawings, etc.) They are published on a FCFS basis, space permitting, and may be edited.

Editor: Ben Barker

*benbarker@earthlink.net*

Mail To: SCAS, P.O. Box 183, Santa Rosa, CA 95402

## SCAS Elected Board

### President

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*jaas1@comcast.net*

### Vice-President & Program Director

*Lucy McMahon 763-2255 lucysonoma@aol.com*

### Treasurer

*Larry McCune (415) 492-1426 llmccune@comcast.net*

### Secretary

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### Membership Director

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### Community Activities Director

*Len Nelson 763-8007 lennelsn@comcast.net*

### Publications Director

*Ben Barker 838-0238 benbarker@earthlink.net*

## SCAS Appointed Positions

### Amateur Telescope Making

*Steve Follett 542-1561 sfollett@sonic.net*

### Young Astronomers Advisor

*Gary Jordan SieraMolly@aol.com*

### Striking Sparks Program & Sparks Day Coordinator

*Coby Lafayette 829-2219 arpgal@sonic.net*

### Librarian

*Joan Thornton 762-0594 phonyjoanie@earthlink.net*

### SCAS "Public" Star party Coordinator

*Loren Cooper 525-8737 lorenc@sonic.net*

## SCAS Library

**Joan Thornton 762-0594**

*phonyjoanie@earthlink.net*

SCAS has a library of over 70 books that may be checked out by SCAS members. A book may be checked out until the next meeting or for one month. Requirements to check out a book:

1. Be a SCAS member.
2. Give me (Joan Thornton) your name and phone number.

## The Semi-Sirius Astronomer

by Herb Larsen



*Rats, not only do we have to contend with moonlight, now we have to deal with all that Mars glare!*

## SCAS "Geysers" Star Party

Location: Palmieri Observatory, Mercuryville, CA  
(on the slopes of Geysers Peak near The Geysers)  
Altitude: ~2700 feet  
Longitude: 122deg 49min  
Latitude: 38deg 46min

The Palmieri family has asked that the observatory not be used during deer hunting seasons. This year's seasons continue through September 21. Consider the observatory closed until the night of September 22. Thank you.

The following Saturday, September 27 should be an outstanding viewing opportunity, two days after new moon. Anyone care to organize the star party? Call Len Nelson.

## Public Astronomy

by Len Nelson

SCAS Community Activities Director

*lennelsn@attbi.com (707)763-8007*

I have requests from 2 schools for September star parties. Please let me know if you can come to either or both:

**Friday, Sept. 19th in Cloverdale** at Washington Elementary School. Lyn Anderson (teacher, SCAS volunteer & RFO Docent) is having a star party for 6th & 8th graders.

**Thursday, Sept. 25th in Petaluma** at McDowell Elementary on McDowell Blvd near the Mervyn's store. I am advising other schools in the area to send their interested students to this event to see Mars before it gets too small. I have instructed the teacher to invite the whole school and not just his class. So, there could be a **BIG** turn out.

*continued from page 1*

## The Great August 2<sup>nd</sup> Star-B-Que

Prior to this moment, Bob Johnston provided great views of solar prominences & sun spots through his Coronado solar scope.

Young Astronomers Blake Pepper-Tunick and his brother Evan assisted [*Old Astronomers? -ed.*] Keith Payea and Len Nelson in opening up the 24" telescope observatory. Blake and Evan clambered up the tall ladder to take in the view from the advantage of the eyepiece height of this fine scope. Their photo can be seen on page 1.

Others took advantage of the fine weather to hike various lengths of the Planet Walk to stimulate their dinner appetites. Many great potluck dishes were brought to the picnic. Kay Johnston's marshmallow marvel, Mrs. Linder's Calico Baked Bean delight and June Ferguson's delicious potato dish were all especially worthy of praise.

We enjoyed the company of three of this year's Striking Sparks telescope winners, Laura Campbell, Haley Washington and Blake Pepper-Tunick. Following the picnic, they went about locating a host of celestial wonders with the assistance and coaching of SCAS members. The 24" reflector and 8" refractor sought out deep sky objects, and the entire evening was an absolute celestial blast. If you did not come this year, you missed a really good one!

## 2003 SCAS Calendar

**Wed. September 10** 7:30 pm General Meeting at Proctor Terrace Elementary, 4th Street and Bryden Lane, Santa Rosa

**Fri. September 12** 7:30 pm Young Astronomers meet at Apple Blossom School

**Thu. September 18** SCAS Board meeting

**Sat. October 4** SCAS Public Star Party, Youth Community Park, Santa Rosa

**Wed. October 8** 7:30 pm General Meeting at Proctor Terrace Elementary, Santa Rosa

**Fri. October 17** Young Astronomers meet at Apple Blossom School

### SCAS "Public" Star Party

**Loren Cooper, Coordinator** (707) 525-8737  
lorenco@sonic.net

Location: Youth Community Park, located in Santa Rosa on the west side of Fulton Road, between Guerneville Road and Piner Road, just opposite Piner High School.

**Saturday, October 4**

**Sunset:** 6:49 p.m. PDT

**Moonset:** 2:16 a.m. PDT (10/5/03)

**End Astronomical Twilight:** 8:17 p.m. PDT

### SRJC Planetarium

<http://www.santarosa.edu/planetarium/>  
(707) 527-4465 or 527-4371

*Santa Rosa Campus, Lark Hall, Room 2001*

**Sept. 5 - Oct. 12: Terrestrial Tour**

The Sun and the objects that revolve around it form our Solar System. Among these objects are the nine major planets and their satellites. In this show we'll see and discover information about the Moon and the terrestrial planets (Mercury, Venus, Earth, and Mars). We'll learn why the Moon and Mercury look so much alike, how Venus is so hot, what makes Mars the red planet, and we'll investigate the asteroid belt.

## Robert H. Ferguson Observatory Public Observing

Phone: (707) 833-6979

<http://www.rfo.org>

The CCD observatory in the east wing is now operating a new 14-inch SCT on a Paramount robotic mount. The Russell 24-inch Dobsonian and Dominican 8-inch refractor are in regular service. The next public observing opportunity is:

**September 20**

Solar Viewing 12:00 noon - 4:00 pm

Night viewing 8:00 pm - midnight

There is no admission fee for the solar viewing, but donations are appreciated. There is a \$2 admission fee for the night viewing sessions, and the Park charges \$4/vehicle for entry.

SCAS members are welcome to set up telescopes to assist with the public viewing. However, automobile access is closed at dusk, so arrivals after dusk will need to be able to carry their equipment in from the parking area by the horse stables.

## NIGHT SKY FALL SERIES BEGINS SEPTEMBER 24

Enjoy a discussion of the constellations in the current night sky and the mythology associated with them. Learn how to find them for yourself. The presentations begin promptly at 7:00PM and last approximately 90 minutes. After each presentation (sky conditions willing), you will have an opportunity to find the subjects of the evening's lecture with docents' assistance. Also, the objects within the constellations will be viewed through binoculars and telescopes, including the Observatory's 24-inch reflecting telescope and 8-inch refracting telescope.

All registration is handled by the SRJC Community Education office. Refer to the Community Education Bulletin of classes or call (707) 527-4371 for instructions. Check the observatory website, <http://www.rfo.org>, for more information or email [jwelch@rfo.org](mailto:jwelch@rfo.org).

*(Ed. note- For a real treat, bring a friend, pack a picnic dinner and enjoy a peaceful sunset in the park before the lecture)*

**SSU Lecture Series**  
**“What Physicists Do”**

<http://www.phys-astro.sonoma.edu/wpd/>  
 (707) 664-2119

Mondays at 4:00 p.m. Darwin Hall Room 108  
 Coffee at 3:30 p.m.

**September 8:**

**Did The Great Masters Cheat Using Optics?**

Dr. David G. Stork of Ricoh Innovations and Stanford University will describe the mysterious rise in naturalism in Renaissance painting and the claim that Renaissance artists employed optical devices such as concave mirrors to project images onto their canvases, which they then traced or painted over.

**September 15:**

**The Fascinating Physics and Applications of  
 Hydrogen in Materials**

Dr. Chris Van de Walle of the Palo Alto Research Center will discuss how quantum-mechanical studies of hydrogen are contributing to technological progress in areas as diverse as silicon integrated circuits, blue lasers, and fuel cells.

**September 22:**

**Probes Of Extra Spacetime Dimensions**

Dr. JoAnne L. Hewett of the Stanford Linear Accelerator Center will describe the rationale for postulating the existence of additional spacetime dimensions, how present and future experiments search for their presence, and how we would determine their geometry once discovered.

**September 29:**

**The Vertical Dimension  
 Of Future Mars Exploration**

Dr. Geoffrey Briggs of NASA's Ames Research Center will describe progress in developing an automated lightweight drill to acquire samples from deep beneath the surface of Mars where water may once have been available in liquid form and where micro-organisms may have been preserved in permafrost.

**October 6:**

**Things My Mother Never Told Me  
 About The Universe**

Dr. Lynn Cominsky of Sonoma State University will explain some basic physical science concepts that seem deceptively simple but are commonly misunderstood.

**Chabot Space and Science Center**

<http://www.chabotspace.org>

(510) 336-7373

**September 21:**

**Galileo “Landing” on Jupiter**

Track the Galileo spacecraft as it descends into Jupiter's atmosphere, with a slide/video presentation on the history and discoveries of the Galileo Mission and a public question and answer period. Free with General Admission.

**Silicon Valley Astronomy Lecture Series**

<http://www.foothill.edu/ast/>

(650) 949-7888

**Wednesday, October 8, 2003, 7 pm**

**The Mars Exploration Rover Mission:  
 Following the Water**

Dr. David Des Marais of NASA's Ames Research Center will give a non-technical illustrated talk in the Smithwick Theater, Foothill College, Los Altos Hills, California. Free.

**Morrison Planetarium**

**Dean Lecture Series**

<http://www.calacademy.org/planetarium/>

(415) 750-7141

**September 23:**

**Mapping the Universe From Antarctica**

Dr. Kim Coble, University of Chicago & Adler Planetarium

The Cosmic Microwave Background (CMB), which formed when the Universe was only a few hundred thousand years old, is one of the most important lines of evidence for the big bang theory. Observations of the CMB, including ones made from Antarctica, can be used to test models of how large-scale structures formed and to answer questions about the nature of our Universe.

**SSU Dept. of Physics & Astronomy  
 Observatory - Public Viewing**

(707) 664-2267

**September 19:**

8:00 - 11:00 p.m. Mars, Eagle Nebula

The observatory is inside the football field at the SE corner of the campus, East Cotati Avenue and Petaluma Hill Road, 2 miles east of U.S. 101 at Cotati.

## Young Astronomers:

### Introducing Gary Jordan - Our New YA Adult Adviser

I am 46 years old, was born and raised in San Rafael, and have lived in the Bay Area my entire life. My wife Susan and I have lived in Sebastopol for the past 15 years. We have no children at home, but since we're both 5th / 6th grade teachers, the 32 kids in each of our classrooms help fill that space in our lives. At home, we have 2 dogs, 3 cats and a green Amazon parrot. I just began my 11th year as a teacher at Piner Elementary in Santa Rosa.

My educational / professional background prior to becoming a teacher is somewhat diverse. I have an A.A. degree in music, and a B.A. in broadcast communications as a recording engineer. I taught radio and recording studio engineering at SF State from 1979 - '81, and was a partner in Meltdown Audio (a live sound and recording company) from '80 - '84. I was a project manager for Pacific Telesis from '84 - '87. In 1987 I joined a Silicon Valley startup called Octel Communications, and served as the manager of their field service group for the Northern California region. By late 1991 I was tired of commuting from Sebastopol to Milpitas and other equally glamorous parts of the state. I left the hectic life on the road to others, and enrolled in the Sonoma State teacher credential program. I received my credential in 1993, and have been teaching at Piner Elementary ever since. I absolutely love being a teacher! Every day is a unique experience, and the kids are wonderful.

My hobbies include backpacking, music (I do recording and live sound for some Sonoma County swing and jazz bands), stained glass, and learning anything about space / astronomy / cosmology. I am a member of the Planetary Society, and the Challenger Center for Space Science Education. For as long as I can remember I've been interested in anything about astronomy and space.

This interest was fueled by some great teachers, especially my science teachers in junior high and high school. As a 9th grader I attended a night class on making your own telescope, taught by John Dobson. Using that 8" Dobsonian scope opened an entirely new view of the universe for me (both figuratively and literally!) It was inspiring to see the universe through a device made with one's own effort, and

I continued to use it constantly through my early college years.

I wish an organization such as SCAS and YA had been available to me when I was a young student. It would have made my experiences with astronomy even richer and more exciting. I would love to help the YA organization grow and flourish in any way I can. It is an awesome community resource that can truly "strike sparks" of interest in astronomy for students.



*Gary Jordan, new Young Astronomers Adviser*

### Young Astronomers' Calendar

Sept. 12th - The Moon - Presenter, Len Nelson

Oct. 17th - The Milky Way - Presenter, Jane Houston Jones Note: this is on the **3rd** Friday of the month. We want a clear, dark sky -make it happen.

Meetings start at 7:30 p.m. at Apple Blossom School, 700 Water Trough Road, Sebastopol. The multi-purpose hall is the 'large' building on the right side of the school that one sees from the main parking lot.