

★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 49, No. 1 – January 2001

San Francisco
Amateur Astronomers



Sharing the Wonders
of the Universe



Information Hotline
(415) 566-2357

Web Page
<http://www.zennla.com/sfaa>

From the President

The January meeting will be the Annual SFAA Dinner and Awards meeting. It will be held on Saturday evening January 27 at the Basque Cultural Center, 599 Railroad Ave., South San Francisco. All are welcome to come to the dinner where we will give out club awards and install the new club officers and board of directors.

The Astro photography award winners will be announced at the SFAA Annual Dinner.

The winners of the Literary award sponsored by Orion Telescopes will be presented their awards at the SFAA Annual Dinner.

So join us for a good evening. Note the deadline for signing up in the details as outlined in this bulletin.

We are all looking forward to a really good year in 2001.

Happy
New
Year!

SFAA Officers 2000

President Al Stern
(415) 929-7035

Vice-President Bill Stepka
(415) 928-2367

Secretary Renita Mock
(415) 566-2357

Treasurer Chelle Owens
(415) 479-5313

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Bulletin Editor

Lorrie Boen (415) 921-1432

Telescope Loans

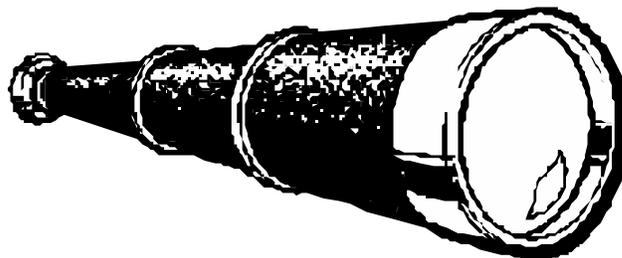
Ray Cash (415) 665-8666

SFAA Website Update

For those of you with online access, don't forget to visit the club's website. The bulletin board area especially is a great place to post info and ask questions. Go to <http://www.zennla.com/sfaa>.

Above the Fog is the official bulletin of the San Francisco Amateur Astronomers. It is the forum in which club members may share their experiences, ideas, and observations. We encourage you to participate by submitting your articles, announcements, letters, photos, and drawings. We would also like to hear from our new members. Tell us about yourself – what you have done in the past and what other clubs you have joined. **The deadline for the next issue is the seventh day of the month.** Send your articles to Lorrie Boen at 765 Geary Street #302, San Francisco, CA 94109 or at LorrenLee@aol.com.

Club Telescopes



Long time member Ray Cash-LePennec has 3 loaner telescopes for club member use and is in charge of loaning them out. If you are interested in borrowing a club telescope, give Ray a call. There are many new members in the SFAA and they ask what kind of telescope to buy or use and this is a good way to get to know the Dobsonian type of scope and learn the sky as well.

CLUB DATES

Board Meeting – January 10

7:00 p.m. Western Addition Library – corner of Scott & Geary Sts. SF

SFAA General Meeting – January 27

Annual Awards Dinner
Basque Cultural Center
6:30 p.m.

Slickensides

Jane Houston Jones
Morris Jones

The Hunter moon rose on Thursday night. I love the moon and take every chance I get to see it. To share this vision with others is the best way to spend a bright night.

I was not able to observe the full moon in my usual telescopic manner this month, not that I'm complaining. I didn't have my telescope out. I was busy.

It is the time of the year when we assist John Dobson while he teaches his telescope making classes in San Francisco. It's a once-a-year time that I look forward to and cherish. The only mooning we did on Thursday night was through our eyes. We arrived with John at the Randall Museum in San Francisco for our telescope class. The moon was low and orangey in the San Francisco autumn city haze. The view of the city from the Randall Museum, nestled high atop upward jutting Buena Vista Hill was just spectacular. I don't know if I can describe it. I'll try, though.

San Francisco is a city of hills, and these hills represent some pretty interesting rock formations. In the daytime, there is fascinating geology here near the Randall Museum. Ribbon chert, which used to be the ocean bottom, smashed into the continent here. The rock pressed and crumpled into wavy ribbons of brittle rock, hence the name, ribbon chert. Sliding rocks on either side of the fault rubbed past each other and smoothed the rocks slick. Slickensides are what geologists call this phenomenon.

The shiny Franciscan ribbon chert slickensides can be seen just a block from where we polish our telescope mirrors.

I was amazed to read this conversation recently: It comes from Apollo 15.

144:07 30 Scott: Well, we've got it anyway. See what it looks like here. Ah ha! On the bottom...That looks like (pause) a light-gray microbreccia with some white clast of

millimeter size in it, and that's about all. And, the bottom side has slickensides.

[Slickensides are grooved or smoothed surfaces usually formed by friction, as on the two sides of a fault plane.]

[Fendell raises his aim and, past the 16-mm camera lens, we can see the lower slopes of Mt. Hadley at maximum zoom. He then pans to the right but, because of the reflected light reaching the lens, little detail is visible.]

144:07:54 Scott: And I do see some glass spattered on one side. And I also see one little, looks like an orange crystal in there, like it might be a little piece of olivine. It's got definite reddish-orange color to it.

144:08:11 Allen: Okay. Beautiful!

And now, back to earth...It was time for class to begin.

Below our hilltop museum site the moon was the bright. The busy hooked angle of Market and Castro Streets looked like moving fireflies moving in formation. At the end of the bright lights of Market Street were two images. The glimmering San Francisco bay and the nearly full moon.

It was really beautiful so we brought the class out to look at the moon and the view. John launched into one of his typical and classic questioning sessions.

"Why does the moon look so big?" he asked.

He then told his illuminating and personal spin on the Moon Illusion effect. I really liked having this explained in plain English for a change. I think the students will remember the words and the view and be able to connect them and retell the story to others. That is what is important. Sharing the information is what is important.

Our genetic programming tells us that the sky is flat and nearby. You've seen birds fly overhead, and clouds pass, and you know that they are closest when they are directly overhead. Things on the horizon are more distant.

That unconscious part of the brain that assigns size to things decides that the moon must be very large when it is on the horizon because it's "so far away." The same moon overhead must be smaller because it's nearby. (Of course when we think about the appearance with our conscious brain, we think it must be closer on the horizon because it's larger. Brains just didn't evolve to deal with objects so large and so distant!)

Back in the classroom, we talked about building the rocker boxes for our telescopes. We can't just ignore the Universe here in the classroom, so the topic inevitably turns to Astronomy. John asked the students why the moon was so bright tonight.

When no one answered, he told about the glass beads being lit on the moon. Thankfully, my husband Mojo, elaborated on this point, for the students didn't know exactly why to ask or how to ask the question "what the heck are these glass beads, and what are they doing on the moon".

I found it fascinating to read the Apollo 15 journal, and to read about the astronauts who saw glass in the bottom of a small crater and slickensides mentioned in

the same scoop of moon samples. It evokes an emotion when I view the moon. A few people not too different from me walked on the moon, observed the geology, and took some samples home with them. I like that thought alot!

The drive home from class gave us a different moon view. The moon over the Golden Gate Bridge was higher now and the orange hue had changed to a bright golden pearly Hunter Moon. It was two hours before full, but it was enough of a mooning night for us!

Reference:

SF Slickenside photo
<http://www.geoscapesphotography.com/ca-slickensides.htm>

Slickenside closeup
<http://www.idcomm.com/personal/mtbrem/javatutorial/uinta/slicks.htm>

A geology lesson
<http://duke.usask.ca/~reeves/prog/geoe118/geoe118.052.htm>
↓

Apollo 15 Lunar Journal
<http://www.hq.nasa.gov/office/pao/History/alsj/a15/a15.sta6abv.html>

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"ARE GOOD PLANETS HARD TO FIND?"

TOPIC OF DISCUSSION
JAN. 24TH AT FOOTHILL COLLEGE

On Wednesday evening, January 24th, at 7 pm, Drs. Frank Drake and Peter Ward will discuss the controversial "Rare Earth" hypothesis in the Silicon Valley Astronomy Lecture Series, at Foothill College in Los Altos Hills.

The nontechnical program will focus on the question of whether or not habitable planets (like our own Earth) are rare in the cosmos. Dr. Ward, a geologist and zoologist at the University of Washington, is co-author of a much-debated book called "Rare Earth," which suggests that scientists may be too optimistic about finding Earths and life among the stars. Dr. Drake, is an astronomer at the University of California, Santa Cruz, and one of the founders and the Chairman of the SETI Institute. He is widely known for conducting the first radio search for possible signals from extra-terrestrial civilizations, and for the Drake Equation, a way of organizing our estimates for the number of such civilizations that might be out there. There will be an opportunity for questions from the audience after what should be an exciting discussion.

The program will be held at the Foothill College Smithwick Theater in Los Altos Hills. From Interstate 280, exit at El Monte Road and travel west to the campus. Visitors must purchase a required campus parking permit for \$2. Admission is free and the public is invited. Call the series hotline at 650-949-7888 for more information. The non-technical program is cosponsored by NASA's Ames Research Center, the Astronomical Society of the Pacific, and the SETI Institute. Over 900 people attended several of the lectures in this series last year. Seating will be on a first-come, first-served basis. Children over 13 are most welcome.



Morrison Planetarium Presents

Dr. Jeffrey Bennett, author of

On the Cosmic Horizon:

Ten Great Mysteries for Third Millennium Astronomy

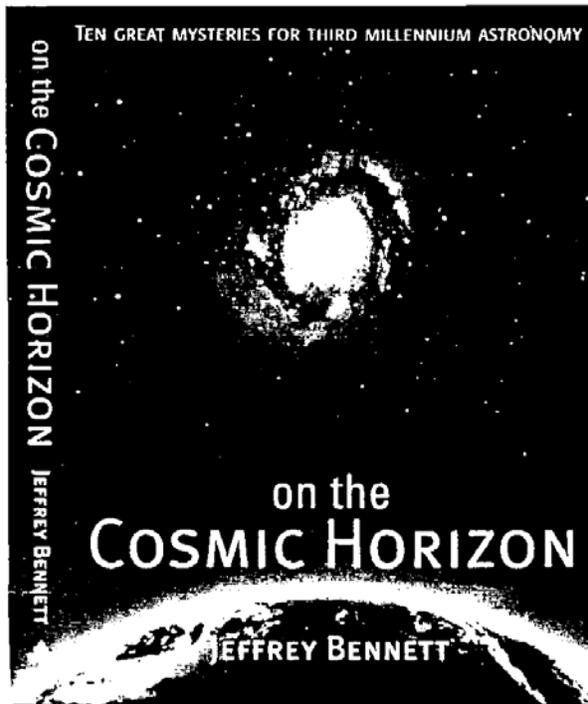
Tuesday, January 30, 2001 - 7:30 pm

Morrison Planetarium

California Academy of Sciences

Golden Gate Park, San Francisco

No Charge – No Reservations required



Dr. Jeffrey Bennett is an enthusiastic popularizer of science and a dedicated educator currently teaching at the University of Colorado. In this, his latest book, Dr. Bennett provides a background that will help the general reader understand astronomical stories that will be making headlines in the early 21st century. As much as we have learned about our Universe, there are still mysteries to be solved. Using a Top Ten Countdown, Dr. Bennett tackles what he considers to be the biggest questions left to be answered and suggests possible resolutions.

This evening is the first in a NEW series of monthly book signings at Morrison Planetarium. One Tuesday evening a month the Academy Bookstore will be open to the public. Authors will be invited to discuss and sign copies of their books in the Planetarium. These events are free and open to Academy Members and the general public. This series will be concurrent with and complementary to the on-going Benjamin Dean Lectures on astronomy and planetary sciences also held monthly in Morrison Planetarium.

For more information:

Please call the Planetarium Office during business hours at 415-750-7127 or 415-750-7141 for recorded information.

Website: www.calacademy.org/planetarium

SFAA Annual Awards Dinner
Saturday, January 27, 2001 - 6:30 p.m.
Basque Cultural Center
599 Railroad Ave, South San Francisco
(650) 583-8091

Our Banquet Menu ~

Prime Rib with Scalloped Potatoes & Vegetables (\$25.00)

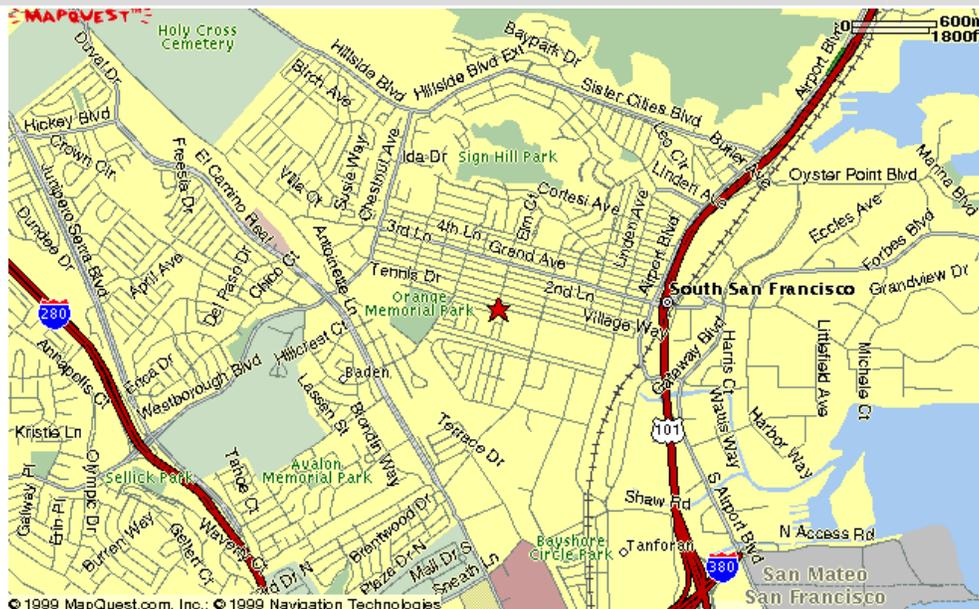
Breast of Chicken Chasseur with Vegetables & Rice (\$20.00)

Vegetarian Pasta (\$17.00)

All meals include Soup, Salad, Bread & Butter, Ice Cream and Coffee – A No-Host Bar is available
 (Prices include tax and tip)

Please send a check or money order, along with your choice of entrée, to Lorrie Boen at 765 Geary Street #302, San Francisco, CA 94109 by **January 14, 2001**. Make checks payable to **SFAA**.

Take the US-101 SOUTH ramp towards OAKLAND(US-80)/SAN JOSE.	0.1 miles
Merge onto US-101 S.	3.5
US-101 S becomes US-101 S/JAMES LICK FRWY.	0.7
Stay straight to go onto US-101 S.	4.7
Take the exit towards GRAND AVENUE/DOWNTOWN.	0.2
Turn LEFT onto AIRPORT BLVD.	0.1
Turn RIGHT onto GRAND AVE.	0.7
Turn LEFT onto MAGNOLIA AVE.	0.2
Turn LEFT onto RAILROAD AVE	0.0



SFAA
SPRING STAR PARTY

at
HUME OBSERVATORY
Pepperwood Ranch Natural Preserve
California Academy of Sciences
Sonoma County, CA

Friday, March 23, 5:00 p.m.



Enjoy the dark skies at Hume Observatory located at the Academy's Pepperwood Ranch in Sonoma County. Observe all night long. Or fall asleep under the stars or on the porch of their cozy cottage.

Bring along your own telescope or use one of several at the observatory.

Kirsten Vanstone is our host for this special evening arranged exclusively for SFAA members at no charge by our friends at Morrison Planetarium.

Overnight on the Bechtel House porch is limited to 20 people.
Accommodations can also be found in nearby Santa Rosa.

If you plan to attend, please fill out the information below and return no later than February 15th to:

Secretary
San Francisco Amateur Astronomers
1630-34th Avenue
San Francisco, CA 94122-3115



SPRING STAR PARTY
Hume Observatory

Name(s): _____

Number of people: _____
(Members Over 18 Yrs. Only)

Address: _____

Telephone: _____

E-mail: _____

Overnight at Bechtel House is on a first-come-first-served basis.



**PLEDGE DRIVE
2001**



KQED Pledge Night is coming in March 2001!!

**Mark your calendars for March when
SFAA spends another fun-filled
evening helping raise money to
keep KQED-TV's great programming
on the air.**

Day and time coming soon!

**Please contact the SFAA secretary at
(415) 566-2357, ext. 2
for more information.**



**Spend an evening of fun, food and watching behind the scenes activity at the Bay Area's
premier educational television station.**

Morrison Planetarium's
Benjamin Dean Lecture Series
presents

23 January

The Blind Leading the Seers – Science Fiction and Science

Science fiction is immensely important to science by getting young people
hooked on science as a career and by keeping the public interested.

How do SciFi writers go about their craft?

Joe Haldeman, MIT

All programs begin at 7:30 p.m. in the Planetarium - Tickets are \$3.00 each
DEAN LECTURE INFORMATION LINE at (415) 750-7141



San Francisco Amateur Astronomers

c/o Morrison Planetarium
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118
Tel: (415) 566-2357

2001 Calendar of Events

January

- 10 Board Meeting *
7:00 p.m.
- 27 Annual Dinner &
Awards
7:00 p.m.

February

- 14 Board Meeting
7:00 p.m.
- 21 General Meeting &
Lecture
7:30 p.m.
- 24 City Star Party
6:00 p.m.

March

- 14 Board Meeting
7:00 p.m.
- 21 General Meeting &
Lecture
7:30 p.m.
- 31 City Star Party
6:00 p.m.

April

- 11 Board Meeting
7:00 p.m.
- 18 General Meeting &
Lecture
7:30 p.m.
- 21 Mt. Tamalpais Star
Party
8:00 p.m.
- 28 City Star Party
7:30 p.m.

May

- 9 Board Meeting
7:00 p.m.
- 16 General Meeting &
Lecture
7:30 p.m.
- 26 Mt. Tamalpais Star
Party
8:30 p.m.

June

- 2 City Star Party
8:00 p.m.
- 13 Board Meeting
7:00 p.m.
- 20 General Meeting &
Lecture
7:30 p.m.
- 23 Mt. Tamalpais Star
Party
8:30 p.m.
- 30 City Star Party
8:00

July

- 11 Board Meeting
7:00 p.m.
- 18 General Meeting &
Lecture
7:30 p.m.
- 21 Mt. Tamalpais Star
Party
8:30 p.m.
- 28 City Star Party
8:00 p.m.

August

- 8 Board Meeting
7:00 p.m.
- 15 General Meeting &
Lecture
7:30 p.m.
- 18 Mt. Tamalpais Star
Party
8:00 p.m.
- 25 City Star Party
8:00 p.m.

September

- 12 Board Meeting
7:00 p.m.
- 19 General Meeting &
Lecture
7:30 p.m.
- 22 Mt. Tamalpais Star
Party
8:00 p.m.
- 29 City Star Party
7:30 p.m.

October

- 10 Board Meeting
7:00 p.m.
- 17 General Meeting &
Lecture
7:30 p.m.
- 20 Mt. Tamalpais Star
Party
7:30 p.m.
- 27 City Star Party
7:00 p.m.

November

- 14 Board Meeting
7:00 p.m.
- 21 General Meeting &
Lecture
7:30 p.m.

December

- 12 Board Meeting
7:00 p.m.
- 19 General Meeting &
Members' Night
7:30 p.m.

* Board meetings for club
members only.

** Registration fee requested.

Founded in September 1952, the San Francisco Amateur Astronomers (SFAA) is an association of people who share a common interest in astronomy and other related sciences. Our membership consists of people from all walks of life, educational backgrounds and ages. Many SFAA members own their own telescopes; some have been made by hand in local telescope-making classes and vary in size from 6 to 25 inches.

Treasurer, SFAA, 13 Mabry Way, San Rafael, CA 94903

make checks payable to **San Francisco Amateur Astronomers** and mail to:

- \$25 enclosed, individual membership
- \$30 enclosed, foreign membership
- \$30 enclosed, family membership
- \$30 enclosed, institutional membership
- \$8 enclosed, youth membership (under 18)

Select one category:

Email address:

Address:

Name: Telephone:

San Francisco Amateur Astronomers Membership Application

San Francisco Amateur Astronomers

c/o Morrison Planetarium
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118

**In This Issue of SFAA's
Above the Fog**

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- **Annual Awards Dinner**
- **Spring Star Party at Hume**
- **KQED Alert**
- **2001 Calendar**
- **and more...**