

ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 50, No. 2 – February 2002

The San Francisco Amateur Astronomers announces The 50th Anniversary Speakers Series Women In Astronomy

“Astronomy is Woman's Work”

Tinka Ross
February 20, 2002

Tinka Ross a long time SFAA member will be inaugurating the San Francisco Amateur Astronomer's 50th anniversary speaker series on women in astronomy. To celebrate our golden anniversary, we will be having women in the field of astronomy and related sciences speaking at our monthly public meetings, the third Wednesday of each month, throughout the year 2002.

Tinka is the speaker coordinator for the Mount Tamalpais star parties and the Benjamin Dean Lecture Series at the Morrison Planetarium. She received a BA in astronomy from Wellesley College and was an instructor of astronomy at College of Marin, in Kentfield, CA- (1988-1998) and faculty advisor for the "Women in Science" campus club (1995). Tinka as a Teacher Resource Agent for Hands on Universe developed by UC Berkeley (part time) trained teachers in the use of HOU materials.

Tinka's talk, “Astronomy is Woman's Work” will be on the history of women in astronomy. She will discuss the major contributions to science of women in the past as well as the contributions of women scientists today and their current role in the field of astronomy.

San Francisco
Amateur Astronomers

Web Page:
www.sfaa-astronomy.org



Sharing the Wonders
of the Universe

Information Hotline
(415) 566-2357

2001 Club Officers & Contacts

<i>President</i>	Bill Stepka (415) 928-2367	<i>City Star Party Coordinator</i>	Randy Taylor
<i>Vice President</i>	Nancy Cox (415) 826-2217	<i>Membership & Subscriptions</i>	Chelle Owens (415) 479-5313
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<i>Treasurer</i>	Chelle Owens (415) 479-5313	<i>Telescope Loans</i>	Pete Goldie (415) 206-9867
<i>Honorary Director</i>	John Dobson	<i>SFAA Website</i>	www.sfaa-astronomy.org
<i>Board Members</i>	Lorrie Boen Dan Christian Art Owens	Michael Portuesi Al Stern	Dennis Tye Jim Webster
<i>Alt. Board Members</i>	Rita Nossardi Stern	Randy Taylor	

Club Telescopes

The SFAA owns 3 club loaner telescopes, Dobsonian/Newtownian reflectors: 6" f/10, 8" f/7, and 10" f/8. These are available for extended periods (30 days or more) to SFAA members. These are generally very fine scopes, easy to use and well-suited for deep sky, planets, and star parties. The loaner custodians are Pete Goldie & Sarah Szczechowicz, located in San Francisco. If you are interested in borrowing a scope, or if you have items you can donate for the loaner program (eyepieces, star maps/books, collimator, etc.) please contact them via email (pg@lbin.com) or phone (415-206-9867). Email communication is preferred and strongly recommended for a quick and accurate reply.

Important Dates

Board Meeting – February 13 – 7:00 p.m.

-- March 13,

Western Addition Library, Scott & Geary Sts., SF

SFAA General Meeting – February 20

Morrison Planetarium, Golden Gate Park

Refreshments at 7:00 p.m.

Speakers begin at 7:30 p.m.

Mt. Tam Star Party

April 13 – 8:00 p.m.

City Star Party

March 16 – 6:00 p.m.

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

The President's Report

The January annual awards dinner and induction of club officers will be Saturday February 2, 2002 at The Basque Cultural Center (same place as last year). No host bar at 6:30 PM and Dinner is at 7:00 PM. The food is very good, the accommodations for us there are what we need, and there is plenty of parking. The price per person and the menu selection options will appear elsewhere in this bulletin.

Our guest speaker for the Wednesday February 20, 2002 meeting will be SFAA member Tinka Ross who will begin our 50th anniversary speaker series of 'Women in Astronomy and Related Sciences' with a talk about The History of Women in Astronomy.

Our first scheduled star party of the year 2002 will be at Point Lobos near the Cliff House, the usual place, on Saturday February 16th 2002 at 5:30 PM. As usual we would like to thank the Golden Gate National Recreation Area for providing support for this program which we jointly run with them.

I would like to congratulate Bill Stepka on his election as President of SFAA, taking office on February 2, 2002. The rest of the new board is to be congratulated as well. All the people on the ballot were elected to the board and their positions will be announced at the awards banquet dinner on February 2nd.

I would like to take this opportunity to thank the many members of the club who have made contributions to the club during the last four years. There have been many people who have spent a lot of time helping getting things done and participating in many of the events that the club has had. Thank you for all of your help. I trust that you will continue to support the club in the same manner in the future. The SFAA is a diverse group of people who come together to share their interests in astronomy and seem to have a good time doing it. I know that it has been fun for me and I plan to continue to participate in club activities.

Al Stern

BIOGRAPHY OF TINKA ROSS

EDUCATION: Wellesley College, BA in astronomy

STAR*DATA - owner/operator of a consulting service on astronomy, includes doing outreach in local schools with a StarLab portable planetarium booked through the Sierra Pacific Educational Adventures since 1994.

Also conducting solar eclipse expeditions world-wide: jointly with Twilight Tours, Burbank, CA (Indonesia 1988, Mexico 1991, Uruguay 1992, Bolivia 1994, Venezuela 1998) or independently (Louisiana 1984, Siberia 1990, California 1992, New Mexico 1994, India 1995, Siberia 1997)

California Academy of Sciences (part time)-lecturer in the Morrison Planetarium since 1980; coordinator of the Benjamin Dean Lecture Series since 1994; instructor, adult & junior classes; operator of Hume Observatory

College of Marin, Kentfield, CA- instructor of astronomy (1988-1998)-faculty advisor "Women in Science" Hands on Universe developed by UC Berkeley (part time) Teacher Resource Agent - training teachers in its use

VOLUNTEER POSITIONS:

Mt Tam Astronomy Programs: initiator & coordinator of a monthly lecture series on astronomy held on Mt Tamalpais State Park (since 1988)-AANC Professional Award in 1993, program won AANC Award in 1998.

Project SPICA - a program on astronomy education developed by the Harvard-Smithsonian Institute of Astrophysics -presenter of teacher training workshop on astronomy

Project Astro: a National Science Foundation pilot program to help improve science education in our schools conducted by the Astronomical Society of the Pacific, Work with teachers at Cleveland Elementary in San Francisco and Mill Valley Middle School. Won Superintendent's Award in 2000.

AFFILIATIONS: Educator: UPM, AAAS, NSTA, CSTA

Planetarium: IPS, PPA

Amateur Astronomer: IOTA, ASP, AL, WAA, NCAA, SFAA, SCAS, EAS

SFAA Annual Awards Dinner
Saturday, February 2, 2002
No Host Bar - 6:30 p.m. - Dinner – 7:00 p.m.
Basque Cultural Center
599 Railroad Ave, South San Francisco
(650) 583-8091

Our Banquet Menu ~

Prime Rib with Scalloped Potatoes & Vegetables (\$27.00)

Breast of Chicken Chasseur with Vegetables & Rice (\$22.00)

Vegetarian Pasta (\$19.00)

All meals include Soup, Salad, Bread & Butter, Ice Cream and Coffee. Price includes tax and gratuity.

Please send a check or money order, made out to San Francisco Amateur Astronomers, along with your choice of entrée, to Lorrie Boen at 765 Geary Street #302, San Francisco, CA 94109 by **January 26, 2001**.

Directions from San Francisco, Highway 280. Take the Westborough exit near South San Francisco. Turn left at the light. (heading toward San Francisco Bay). Turn right at El Camino proceeding South. Two or three blocks later turn left onto West Orange heading toward San Francisco Bay. Go for some distance (what would be about 5 blocks except there are almost no side streets) Turn right onto Railroad Ave. Drive a few blocks and then turn right into the parking lot of The Basque Cultural Center at 599 Railroad Ave.

OLD SOL: PULSES OF OUR EXISTANCE

Art Owens

Here it is again, the first full day of winter. I see people scurrying about, doing their Holiday shopping. It is raining at a steady pace. Men, women, and children: flesh, blood, muscles, tissues, nerve cells, thousands of miles of veins and arteries, a heart – the engine that runs the whole thing we call a body, a brain – filled with neurons, sensors that tell each appendage where and when to move. All of this material, which constitutes our bodies, is producing pulses and electrical energy from the many chemical reactions that go in our own contained universe, our bodies.

From this fixation of thoughts, of pulses, of life on Earth, I will put my gray matter in a mode of thought and go back in time to when there was no Solar System, as we know it. There was only a cloud of hydrogen and helium. As this cloud was set in motion from a slow spin, to a very rapid spin, extremely hot temperatures and convection were created. This plasma carried with it electromagnetic waves which helped to hold all of this together. With this motion, and the addition of billions of years of time, developed a beautiful Sun and the enigmatic planets.

Science tells us that the Sun has a core, a radiation zone, a convection zone, a photosphere and a corona filled with electromagnetic waves and pulses. We know that the Sun vibrates with pulses and waves, expands and contracts, creating large storms of energy. From these storms, comes electromagnetic plasma, called the solar wind. It is known that these pulses of energy give life to the Earth.

My little gray cells will go on searching for understanding of the Solar System that surrounds us. Chelle and I wish for clear skies this New Year to motivate you to look up and observe the vast Universe.

Saturn, Lord of the Rings

Jane Houston Jones

I named my trusty 12.5 inch f/5.75 Litebox travel telescope Strider years ago. Strider is the nickname of Aragorn, the 39th Heir of Isildur in the J. R. R. Tolkien saga, Lord of the Rings. The wizard Gandalf called Aragorn "the greatest traveller and huntsman in this age of the world. Aragorn experienced many great adventures and travelled to many distant lands". I knew my Litebox telescope would do the same, and would honor his namesake by hunting far-away celestial objects and traveling near and far.

Last night Strider and I set up on the corner of 24th and Noe Streets in San Francisco. It was a beautiful night. The air was cold, and because we were in-between winter storms, the seeing (much twinkling of stars indicates bad seeing and turbulent atmosphere) was spectacular and transparency (sky darkness) was ok for the middle of a light polluted urban center. For four hours I showed hundreds of passersby Saturn, the Lord of the Rings. Mojo had his 14.5 inch f/4.8 Litebox reflector telescope aimed at Jupiter, using his 21 Lanthanum for 85x and progressing to a 2x barlow for 170x. Before Jupiter rose above the buildings, he showed a stunning view of Rupes Recta, the Straight Fault to our guests. Jorge joined us, and set up a C-5 Schmidt-Cassegrain telescope on the adjacent corner. He was showing Plato and other nearby lunar features.

I explained some facts about Saturn to the people in line in-between trips up the ladder to nudge the planet back to the center of the eyepiece. I told people Saturn reached opposition December 3. And that it is about 9.6 a.u., 1.4 billion km or 888 million miles from the sun. For ease of explanation, I usually told our visitors Saturn was about 800 million miles from earth. And that Saturn had a lot of moons - 18 to be exact last time I checked, but that only 6 or 7 were visible to most amateur astronomers through their back-yard based telescopes.

I explained about the rings made of ice and rock, the belts and zones on the planet are really cloud tops, that Saturn has a rocky core, a liquid metallic hydrogen layer, and a molecular hydrogen layer, and then let them loose at the eyepiece to see for themselves. The lines were never really long so each viewer got some of this explanation and heard other bits while waiting or viewing.

For sidewalk astronomy we use low to medium power so the objects don't move out of the field of view of our old fashioned (but very cool) telescopes too quickly. I was using my 16mm Nagler eyepiece for 125 times magnification most of the time.

Saturn, Lord of the Rings elicited the gasps of wonder, the oohs and aahs we all love to hear when showing people views through our telescopes. The brown South Equatorial Band was easy for everyone to see. The Cassini Division between the rings was so dark and clear it looked like train tracks circling the Christmas tree. And 5 of the moons were easy to spot. In my reflector at 10:00 p.m. Saturn was aligned north to the right, south where most of the planet was visible to the left. East was up and west was down, and that was the orientation of the rings, nearly straight up and down in the eyepiece. The planet itself was a pretty sight, and it was encircled by moons. Like on the face of a clock, 9.8 mag Rhea illuminated the 12:00 spot. 8.1 mag Titan brightly shone at 3:00, and was clearly disc-like and appeared ruddy red. Mag 9.9 Tethys was between Titan and the ring, also at 3:00. Mimas was too faint and too close to the ring for us to see, even closer than Tethys. Continuing clockwise, mag 10.8 Iapetus at 4:30 and mag 10.1 Dione were clearly visible at 6:00. Rhea, Titan and Iapetus formed a straight line, from southeast to northwest. The other moons, Hyperion and Enceladus were too faint for the city view.

Being the holiday season, we had some interesting visitors. There were at least 4 Santas and a pair of inebriated elves who stopped for a look. There were plenty of children, grandparents, a few homeless men, and even two missionaries who stopped to see what we were offering in the large telescopes.

The Lord of the Rings, Saturn, never fails to make us stop and appreciate the wonders of our universe. I wish everyone one in the world could pause and take a look tonight.

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:

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

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

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