



From The President

Let me be the first to welcome you to the Riverside Astronomical Society.

You have become a member of a group of amateur astronomers that share the same passion and love for the world of astronomy. The RAS is rich with history going back to the 1940's and for over fifty years the club has been sharing the heavens with our friends, family and the local community. RAS was created by individuals that wanted to bring people together that shared the same enjoyment for astronomy. The club is very active in public outreach in the Riverside area, which brings astronomy to everyone and shares our telescopes with schools, nature centers, museums, scouts and the general public. The club also has special interest groups like astro-imaging and telescope making to share their knowledge with you.

The club has a fine group of volunteer officers who consistently provide the best of programs and events for your education and entertainment. These people are truly good at what they do. We have varied events scheduled nearly every weekend, and many weeknights.

The RAS not only has the finest of people and events, but the best of facilities. Our hosts at La Sierra University provide a comfortable, modern meeting space. Our ten acre dark sky site with kitchen, dormitory, and club house is hard to beat. We have established the infrastructure and provided great equipment, such as Capella, the club's 22 inch scope, for all to use.

You are encouraged to make the most of your membership. Find out what the club can do for you. If I can help in any way, please look me up.

As Always, Clear Skies,

Frank

Frank Boecker, President

Membership Information

Your membership entitles you to participation in all activities of the Riverside Astronomical Society. You will receive a monthly edition of the Prime Focus Newsletter. You are eligible to hold a license for a pad or observatory (when available). You are eligible to vote in the election of trustee, and to volunteer as a club officer.

All memberships expire at the end of June every year, and may be renewed at the meetings,

by mail, or by Paypal. If you paid for a new membership at the introductory rate (\$20 individual/\$25 family), your renewal will be at the regular rates (\$40/\$50). Memberships are also available to students (\$20). And you may become a Patron (which includes membership) at the \$100, \$200, or \$300 levels.

We do most membership business through email, so be sure if you change your email address to

notify the Membership Directors. If you are not getting your Prime Focus, something is wrong with your mail or email address, and those issues may be resolved by the Membership Directors.

We do not have membership cards or numbers. If you need proof of membership for some reason, please contact the Membership Directors, Frank and Linda Boecker, at membership@rivastro.org.

About the Riverside Astronomical Society

The *Riverside Astronomical Society* has a history of civic and educational support since its beginnings in 1957. The RAS owes its start to people who saw the need to promote a better awareness of astronomy to the general public. Besides this, they saw a need for a common forum for amateur astronomers to further develop and advance their hobby.

In its early days, the club met regularly at Victoria Savings and Loan. Early members supported local schools, the Girl Scouts and a regular schedule of star parties, which was initiated for the general public. About 1964, the club size and activities started to accelerate under the leadership of a well known amateur astronomer, the late Clifford Holmes.

By the late 1960's, the membership had grown to about 100. At larger starparties in the Gavalin Hills the club treated the public to telescopic views of the Apollo docking with the Lunar Lander. The club also sponsored the building of an observatory (equipped with an 8-inch Newtonian telescope and a TV video system) for the Alvord School District.

That tradition has continued for more than fifty years, as RAS outreach teams have provided personalized star parties for malls, schools, churches, and scout troops in the Inland Empire. The RAS has been nationally recognized for its outreach efforts. The society has worked hard to educate and enlighten the local

Harold Kaiser, club president in the early sixties, and members of the club at his observatory in Riverside. More history is at rivastro.org/



community as well as provide a growing and nurturing environment to those who want more than just a casual look into the cosmos.

The RAS has shared many unusual astronomical events among their members and the public over that history. In 1974, the RAS organized two weeks of observing sessions at the Palm Springs Tramway for Comet Kohoutek. For two days in 1976, the RAS treated over 300 people to the early morning wonders of Comet West. When Halley's Comet arrived in 1986, the RAS conducted two weeks of observing sessions, enabling the public to see the comet at its best. More recently, in July 1994, the RAS showed 500 people impacts caused by the collision of comet Shoemaker-Levy 9 with Jupiter. For 1996, the club brought the spectacular views of Comet Hyakutake to hundreds of people from a location in the high desert. Comet Hale-Bopp also put on a great display for large groups of people who traveled out to Joshua Tree National Park in the spring of 1997. In 2001, about 440 people showed for the great Leonid Meteor shower.

In 1969, we made one of our most significant contributions to the world of amateur astronomy - the Riverside Telescope Makers Conference (RTMC). RTMC has grown into one of the largest and best known international confer-

ences in amateur astronomy. Although RTMC is now a separate entity, RAS members still contribute significantly to its success.

The Club has conducted tours for its members to such places as Mt. Wilson, Mt. Palomar, JPL, Goldstone, and several local observatories. RAS members have also furthered academic research by working with the US Naval Observatory in conducting Grazing Occultation observations, by studying asteroid light curves, and in other ways.

In August 2000, five acres of desert property in Landers, California was generously donated to the organization for astronomical use. This was a momentous breakthrough for the club. Two years later, the club acquired, through the generous financial support of its membership, an additional 5 acres of property in Landers (and sold the original acreage). In 2008, the club added an adjoining five acres to Goat Mountain Astronomical Research Station. The now ten acre reserve includes two small houses, a garage/workshop, and pads and observatories for its members. This site has been developed into a full-fledged observing location far from the city lights. There is a public telescope field and camping area, a number of member observatories and telescope pads, and a public observatory housing our 22-inch Dobsonian telescope. Many organization members have generously donated their time and money towards the development of the site.

There is much more to say about the club and its fifty years of tradition. But for most of us the most important achievement is that many a child has had their first glimpse of the universe through the eyepiece of a telescope that has been lovingly fashioned by a member of the Riverside Astronomical Society.

Organization and Finance

As an astro-club, we exist to do things astronomical and have fun. As a large organization, though, we have to pay attention to some organization and finances! You are encouraged to take an active role in this club. Know how decisions are made, and financed. Become an officer, or if you aren't interested in a title, or volunteer now and then! It is your club. So, be part of it. This section is for all those who want to know more about how their club is run.

The Riverside Astronomical Society incorporated as a California 501c3 corporation 1983 and is governed by state laws and its own by-laws. Organizational documents, by-laws, and certain procedures and policies are available on the website (rivastro.org). These documents outline our planning, financial reporting, calendar, appointment of officers, and so forth that are essential to any large undertaking. All this business, and the actual work of star parties, scheduling speakers, providing refreshments, organizing door prizes, and... is done by the Board members and officers. Their names are on page 12.

Board members are elected by the membership as a whole. At the appropriate annual meeting, usually once every three years, each member has one vote for up to seven Trustees (two votes for "Family Memberships"). These Board members annually select a Chairperson, Secretary, President, Vice President, and Chief Financial Officer for the corporation. Then the President names other officers, and has them approved by the Board. These officers are listed in the Prime Focus monthly along with contact information.

The Board of Trustees meets quarterly (see calendar on page 12), or more often as necessary. Meetings are open to all members unless there is a special need for confidentiality. Our by-laws provide that once a year (usually the November general meeting) we have an annual meeting of all members. Once every three years, we use this time to select Board members. Otherwise, general meetings are for topics of astronomical interest —not club business.

As with any group of 300, finances are important. They are even more important since we became landowners, and have pad and observatory licensees, utility bills, taxes.... We make an annual financial report to the club in the Prime Focus, and quarterly at the Board meetings. In a club as large as ours, we must have some guidelines as to how to handle money. These guidelines are available on the website. In general they say that, with few exceptions, members are not to spend money on behalf of the club, and cannot expect reimbursement unless expenditures are previously approved.

Our club is financially healthy. Regular membership and renewal fees are major sources of income. Observatory/pad fees pretty much pay the costs of operating Goat Mountain. We expect the "Kitty" at GMARS will pay most star party costs, and door prizes will cover the speaker and refreshment costs. Financially, our club benefits greatly from the generosity of our members. We have passed the hat several times to meet a special need like a new bar-be-cue. And, of course, numerous anonymous donors made possible the original purchase and later expansion of GMARS. Furthermore, we are a non-profit charitable organization. Members can make cash contributions, donate equipment for sale by the club, or even, donate appreciated stock, thereby saving on what they owe the IRS!!!

STATEMENT OF PRINCIPLES

- 1. At all RAS sponsored or participatory events, members and guests of members of the RAS shall, at all times, neither take nor participate in any actions that endanger the safety, welfare or well-being of any invitee, guest or member of the RAS or other participating entity, including the public at large;**
- 2. At all RAS sponsored or participatory events, members and guests of members of the RAS shall, at all times, conduct themselves in an exemplary, courteous and professional manner;**
- 3. At all RAS sponsored or participatory events, members and guests of members of the RAS shall, at all times, treat all others with equanimity, courtesy and respect and shall act to encourage interest and participation in the science of astronomy and interest in the universe in which we live; and**
- 4. At all RAS sponsored or participatory events, members and guests of members of the RAS shall, at all times obey all local, state and federal laws.**

Club Activities and SIGs

Outreach

"Bringing the Joys of Astronomy to Southern California" has long been a mantra of the RAS. Our volunteers show at more than 30 school star parties a year, Space Days, Astronomy Days, and other functions. We also schedule evenings once a month at the local malls, theaters, and bookstores.

Come with or without equipment scope, and tell people about the wonders of the heavens and your hobby. People get so excited when they see a lunar mountain or the rings of Saturn. Events are announced in the calendar, at meetings, and on the website. It takes no special skill or equipment. Just show up and share.



RATS

The RAS continues its strong tradition of telescope making on the third Thursday of every month when the RATS meet at Dr. RAT's (Steve Meyering's) house. There you will find information and assistance building your own scope. You can also find out about repair or modification of your equipment.

We don't publish the map to Steve's house, but you can get information on the meeting and location by contacting Alex McConahay (909 261 6593 or alexmconahay@roadrunner.com)

Urban Astronomers

Although many of the objects of our interest are best seen in dark skies, there is still a lot to see in the city. The moon, double stars, planets, and other objects do not suffer from suburban light pollution. Furthermore, one can learn a lot about observing, new equipment, and other astro-techniques from the city without driving. The Urban Astronomers meet for these special events. Follow the website and Prime Focus announcements to see when and where these events are scheduled.

Astro-Imaging

Advances in equipment and techniques have made it possible for many people to image the heavens. But this special interest has a steep learning curve. It greatly helps to have a few friends around who can help learn the tricks of the trade.

Once a month, on the Monday evenings after Saturday's general meeting, at 7:00 pm at Notre Dame High School (room B4), a group of half dozen or more members of the RAS meet to discuss and learn from each other the intricacies of Astro-Imaging. Their skill level ranges from the raw beginners to some very accomplished practitioners of the art.

If you are interested in taking pictures of celestial objects, this is a good place to start. Each meeting covers aspects of equipment selection and use, acquiring the images, and processing tips and techniques.

This special interest group also has a Yahoo group devoted to it: <http://groups.yahoo.com/group/RASIMAGE/>

The Eagle Nebula, M16, by one of the RAS Astroimagers.



Meeting Info

The RAS has three kinds of meetings:

Membership meetings are held monthly, usually on the full moon weekend in Cossentine Hall (The World Museum of Natural History) at La Sierra University in southwestern Riverside (see Maps section). The pre-meeting "Beginner's Corner" begins at 7:00 and the main membership meeting starts at 7:30. Our Chief Observer reports on recent and upcoming events in the heavens, followed by a "What's Up" about a special celestial object. After a refreshment break, we hear a presentation by a guest lecturer. This is followed by club announcements and the door prizes. After the official meeting, members are encouraged to participate in "Show and

Tell" with a recent astroimage or experience. These meetings are free and open to all, members or not.

Board Meetings are held quarterly, starting at 3:00 in the afternoon preceding some regular membership meetings. These meetings are the business meetings of the club, its board, and officers. All members are welcome to attend. These meetings are at Cocos at the corner of Hole and Magnolia in Riverside.

On monthly meeting days, join club members at Cocos on Hole and Magnolia for dinner at 5:00 pm, and head back for coffee and pie after the meeting!

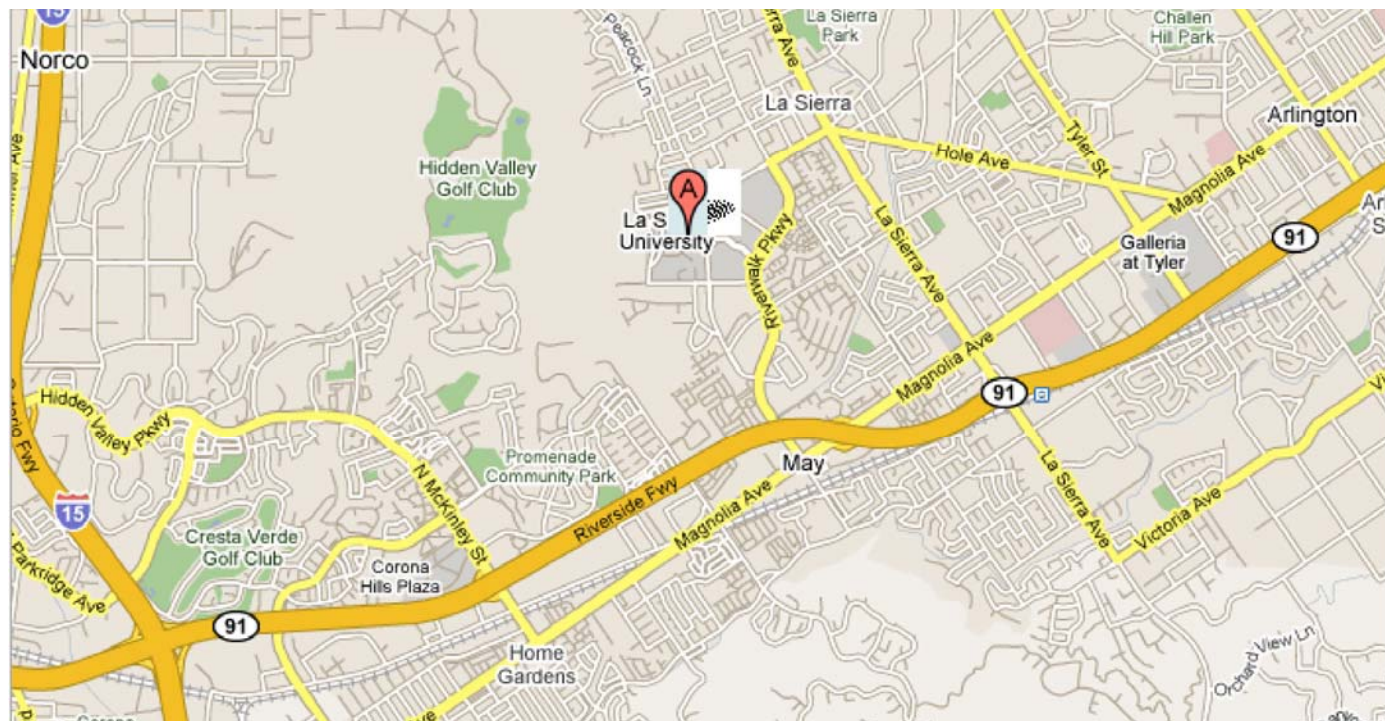
Special Interest Group meetings are also held monthly for Telescope Makers, AstroImagers, and Urban Astronomers (those interested in observing from town). See page 4 on Special Interest Groups and activities.



Cossentine Hall is adjacent to the parking lot (marked as WMCH). Cossentine Hall is also "The World Museum of Natural History".

DIRECTIONS TO GENERAL MEETINGS LA SIERRA UNIVERSITY—COSSENTINE HALL

From the 91 freeway—Exit the 91 freeway going south at Magnolia, proceed a short distance and turn right at Pierce. If going north, take the Pierce exit and turn left. Take Pierce west until it turns into Riverwalk Parkway. Campus maps do not exactly match the reconstructed conditions. Enter the main campus parking area from Riverwalk Parkway, proceed west on the main road and turn right. Travel past the parking areas and turn left onto Lower Campus Drive (yes, the one marked "Pedestrian Use Only" on the map) to Cossentine Hall. Use parking lot "F".



Star Party Etiquette and Notes

Newcomers often want to know what will happen, and what people actually do at a star party. The following information may help those who want to know, but may not know who or how to ask.

SCHEDULE

The RAS calendar has a star party monthly on the weekend closest to the new moon. It is usually at Goat Mountain Astronomical Research Station (GMARS), but occasionally in some other dark sky site. If you can only be there one night, Saturday is the big night. Since most star parties are held at GMARS, we'll describe what happens there. At national forest and other campsites, the idea is the same but the daytime activities will vary.

We encourage you to arrive before dark. This is not always possible, and particularly not after a working day. You may arrive whenever you can, but if you come after dark, you should be sensitive to keeping your lights off. See the section on LIGHTS.

Many people stay overnight. From 11:00 to 11:30 p.m. is an accepted window for people to leave if they must. However, you are free to leave as necessary--with proper consideration for the lights and safety. We encourage you to ask any member for assistance in departing after dark.

Generally, we try to set up equipment in the late afternoon. At about two hours before sunset, we eat in the clubhouse kitchen, at a local restaurant, in the RV, or around the Coleman stove. Observing starts at sunset, and can go on well past midnight, depending on one's stamina.

On Saturday, we sleep in a bit. Pots of coffee boil on various stoves, and in the clubhouse. Daytime activities could include hiking the local desert, flying kites, or helping to fix up the clubhouse and facility. Some people may be found napping during the day, and should not be disturbed.

On Saturday afternoon an hour or so before sunset, we usually have a big potluck/star-be-cue, with hamburgers, buns, and fixings, with members and guests throwing in some desserts, chips, and other things into the pot. There is no charge for the meal, but donations are certainly welcome.

As sunset approaches, new people start to arrive. The newcomers generally include some first-timers, and students coming to earn extra credit in their astronomy classes. We may conduct an informal tour of the telescope field for these folks, or have a short sky tour. The population at the site for the star party weekend generally peaks at sunset, and observing stretches into the night.

On Sunday morning, folks pack up and head off to breakfast or home. The telescope field is usually cleared by about 11:00 a.m.

BEHAVIOR

Except for a general statement that we will follow all laws, safety precautions, and courtesies (See Statement of Principles , page 3) the club has not made any rules about what you can and cannot do at an RAS Star Party.

We do not usually encourage the playing of music or listening to the radio during the evening star party. The few times we have had some music, it could not be heard more than the few feet from the player, and the person who was operating the player checked with neighbors first.

We do not smoke or drink alcohol in or around the telescope field. At club activities, we are particularly sensitive to the use of any alcohol by minors, the use of any illegal drugs, or excessive use of alcohol by adults—none of which is allowed.

Children should be monitored, and no one should be running on the property, especially at night. Members and guests typically wait patiently for their turn to look through a telescope. Attendees with telescopes are expected to allow others to look through their scope (unless they are involved in a specific observing or astrophotography program).

COST

All RAS functions are free to all attendees, members or non-members. There may be a donation bucket at some events, but nobody keeps track of who drops anything in the bucket, or if anyone is a member or not. Your camping, food, and other personal expenses are your own. At GMARS, there is no fee for camping. (At some RAS Star Parties away from Landers, you would be expected to pay for your campsite.)

If you enjoyed your night at our star party, or plan on attending one, you may make a donation to the Landers Site Development fund, or drop money into the kitty jar in the kitchen.

Star Party Etiquette and Notes

LIGHTS

Amateur astronomers know that almost any light will hurt nighttime vision. For this reason, they are careful to bring a dim red flashlight for their nighttime use.

After dark, and anywhere near the site, visitors should NOT use anything but a dim red flashlight.

Even red light will affect one's night vision and observing, particularly if it is bright or not well filtered. This can sometimes happen when a normal flashlight is covered with red cellophane. Flashing lights can also be very distracting, and if bright may affect night vision. They are not desirable on the telescope field. In general, it is best to keep all lights off (even dim lights), unless they are absolutely necessary for walking, or reading observing books and charts. You can usually find someone to help you shield your flashlight for appropriate use at GMARS.

Often, children will point a flashlight at people's faces. This is a natural reflex. Similarly somebody wearing a "miner's light" will point it in the face of a neighbor. Please, always point the light towards the ground, and use it for walking only. You do not need to have a light on if you're standing still or waiting to view through a telescope.



Automobile lights can be another problem. The time to learn how to control your vehicle's lights is before you come to the star party. It is very difficult to learn how to control the lights in the middle of a dark night at GMARS. Look in the manual or talk to the dealer. Most cars have a dial or switch (usually connected to the panel light dimmer) that can shut off the interior lights even with the door open. Other drivers may have to locate the switch, fuse, or relay that controls these lights. Some cars have daytime headlights or automatic headlights that are always on. Sometimes these can be shut off by pulling up one or two notches on the parking brake. If they cannot be controlled this way, there may be a convenient override switch or easy-to-use fuse. If not, the driver has a few choices. One could just forego driving at night (preferred). Or, one could tape some opaque material over the lights. Another alternative is to park down the road. IF YOU MUST DRIVE WITHOUT LIGHTS and you are unfamiliar with the site, *have someone help by walking along to guide you with a red flashlight.* We recommend you park at the entrance (with headlights OFF), and walk in with a dim (red) light and ask someone for assistance. Although we refrain from using lights after dark, we are also concerned about your safety and the safety of others.

RAS member Bruce Lakin (left) broiling burgers for GMARS Star-be-cue. Waiting for sunset at GMARS (below).



Lights should be controlled on the entire site during a star party. Recreational Vehicle windows should be fitted with opaque coverings, and care should be exercised that lights are off when opening the doors of vehicles. Tents are not light-proof, and a typical flashlight or camp lantern in a tent will ruin night vision for those outside. And for those new to "camping" at a star party, it should be said that it isn't really camping as you may be used to, since campfires are not allowed. Also, be sure to use a red mask over your notebook computer screen.

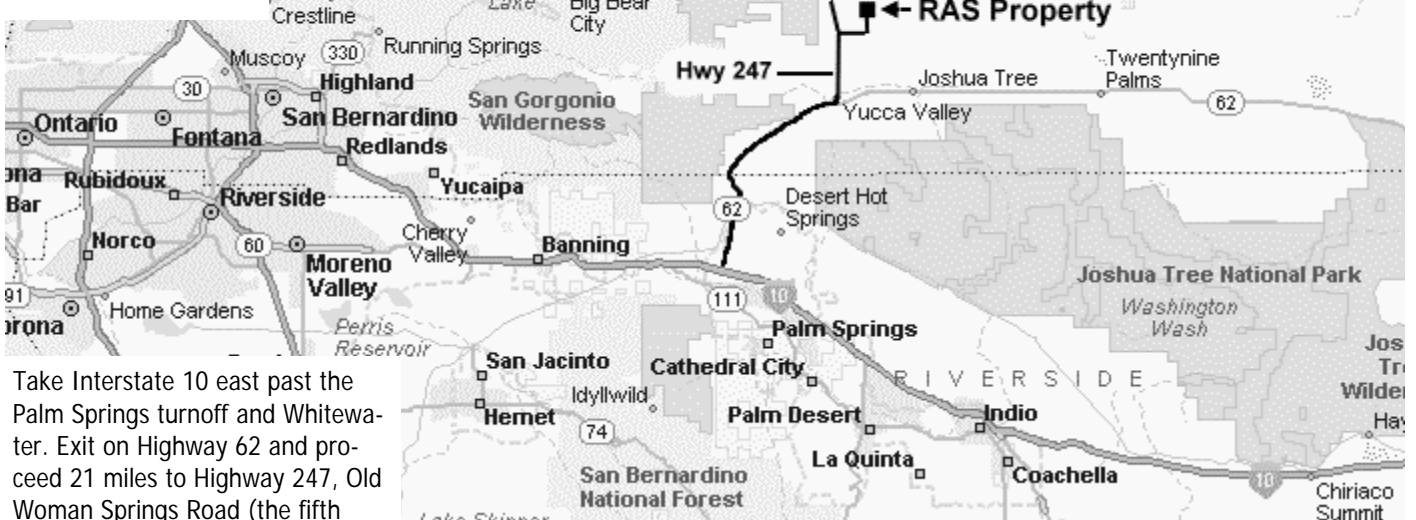
GMARS DRIVING INFO

760-364-1952

34° 17' 26" N,

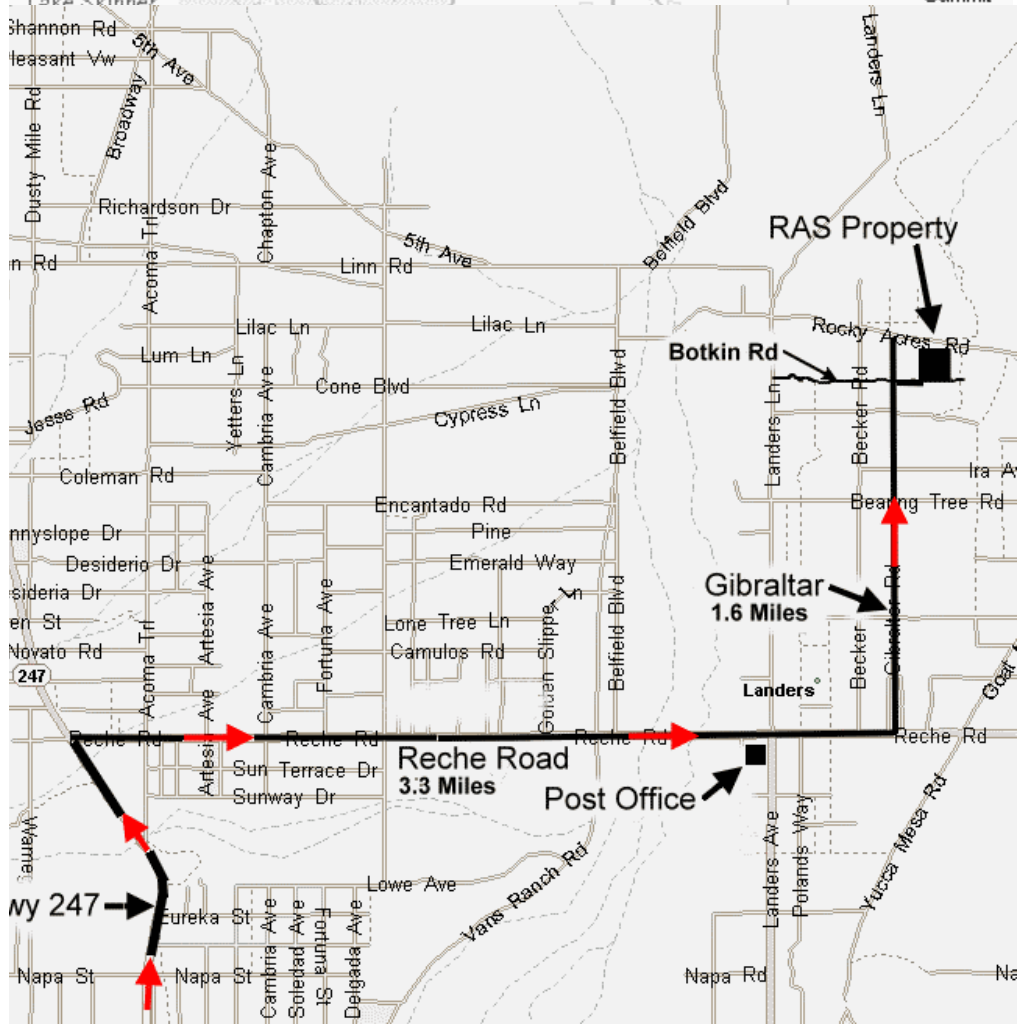
116° 23' 02" W

Elevation: 2937'



Take Interstate 10 east past the Palm Springs turnoff and Whitewater. Exit on Highway 62 and proceed 21 miles to Highway 247, Old Woman Springs Road (the fifth traffic signal in the town of Yucca Valley). Turn left (north) on Hwy 247 and go 10.6 miles to Reche Road. There is a large "Landers" sign at this intersection. Turn right (east) onto Reche Road and go east 3.2 miles to Gibraltar. (You will pass the post office on the right after 2.9 miles at Landers Lane). Turn left (north) at Gibraltar, a well graded dirt road. Count the cross roads. The eighth is Botkin Road, with RAS sign on the right. Turn right here and proceed 100 yards to the entrance on your left. Access roads are unpaved. Stay nearer to the center of the road if possible to avoid soft sand. Drive slowly, and be aware that intersections do not have stop signs. Watch for cross-traffic!

- When you arrive at the site, it is critical that you stay on developed areas. All other sand is very soft. DRIVE SLOWLY to minimize kicking up dust.
- The site has water and limited electricity. RVs are welcome (no hookups). Tent camping is always permitted. HAVE FUN!
- Driving time from Riverside is about 1-1/2 to 1-3/4 hours



Goat Mountain Astronomical Research Station

FOOD AND SUCH

The house is generally stocked with staples like coffee, hot chocolate, and drinking water. The kitchen is fully equipped, so you don't need utensils, pans, plates, or such. The place can be like a commune. Whatever is there is available to all. And of course, you are always welcome to add to the collection of sodas, chips, pies....

The "Star-be-Cue" was originally a "pot-luck" (everybody is supposed to bring something) but that term seems to have been lost on many. So, special desserts or side dishes, or even main courses, are always welcome. But in fact, they are not required, and you can join in the festivities by just dropping some cash into the kitty.

FIRST TIMERS' QUESTIONS

If you have never been to a Star Party before, --just ask. Just as with any other group, we have some quiet and stick-to-themselves people. However, the vast majority of members are more than willing to share with you whatever they know. They will probably provide you with more information than you asked for. The mission of the Riverside Astronomical Society is "Bringing the Joys of Astronomy to the Public." We can't do that if you don't ask. First timers especially should attach themselves to somebody and simply spend the evening around them. If you would like such a mentor, just look around. The best candidates will already have a few people standing around looking through their scopes. Just join in and have fun.

GREEN LASERS

Common sense and courtesy dictates what is acceptable. For sky tours early in the evening, the green laser pointer is certainly a valuable tool. As the sky darkens several hours after sunset, many members will be engaged in astrophotography and imaging. The use of the laser is not recommended except for the early evening sky tour. A laser pointer should never be used as "finder."

EQUIPMENT-- YOURS AND OTHERS

You may come to a star party with or without your own equipment. If you do not have your own equipment, you are welcome to use Capella (the club's 22 inch Dob), or look through other people's scope. Feel free to visit with any person on the field and ask what they are doing or "What are you looking at?" In very rare instances you may run into somebody who simply is working too hard at something to take time to visit with you and have you look through the telescope. This is true for some astrophotography or other specialized observing. These things take a lot of concentration. However, most people on the field would love to have you look through their scope; just be friendly.

If you are new to this, be aware that equipment should be handled with the same care you would give any delicate instrument like a fine camera or good crystal. Generally, equipment is not fragile like these items can be, and won't break when touched. However, since the optics magnify so much, a simple touch can disturb the view, and may even move the scope so that you cannot see the object. So, do everything gently.

If you bring astro-equipment, it is wise to bring your WHOLE setup, and not leave any of the little essential parts

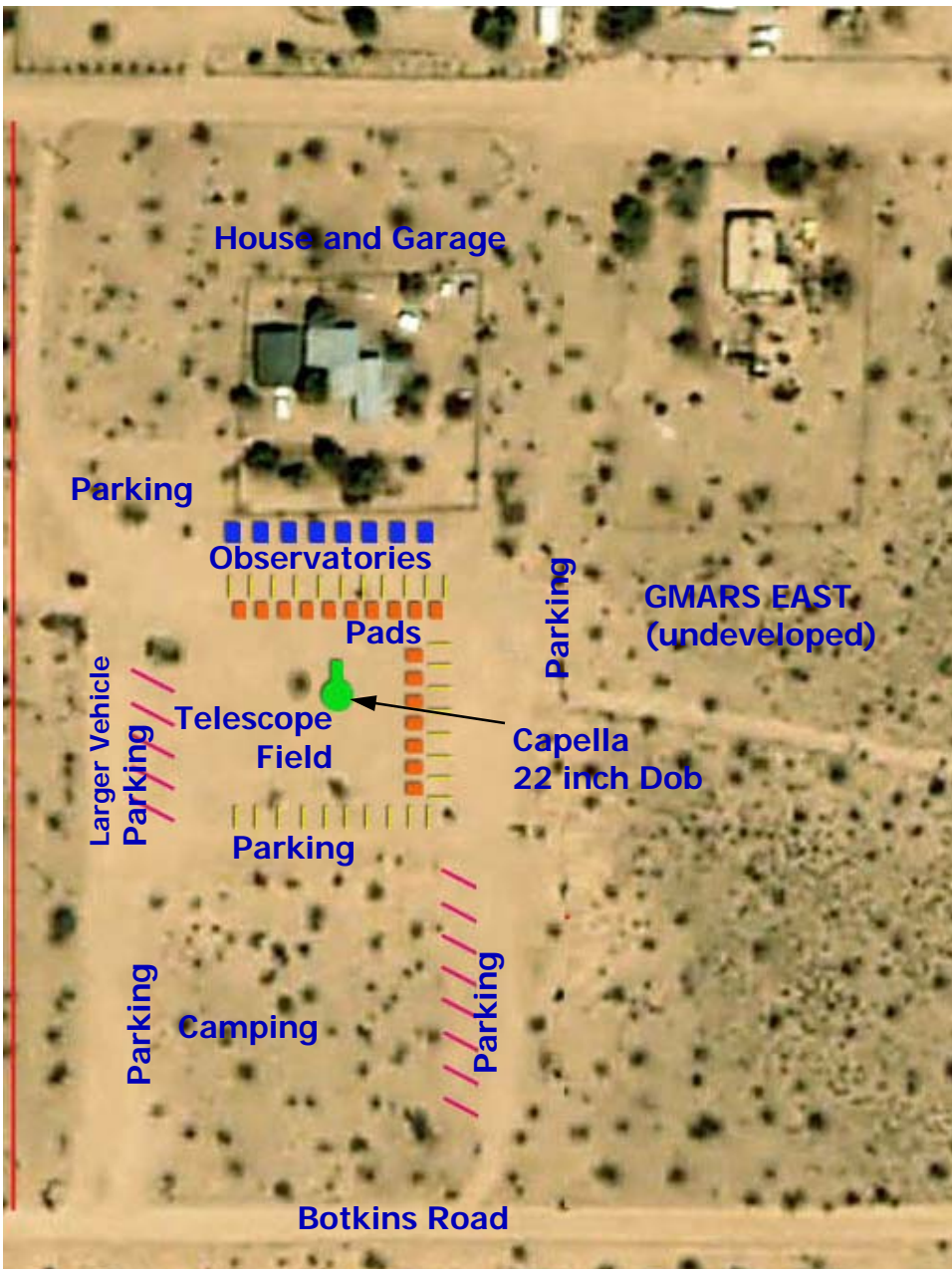
behind. Set it up beforehand at home, and find out exactly what parts you need: tripod, counterweights, hand controller, battery pack, eyepieces, collimator...whatever. Then pack all these parts together in the same place at home. Either fit them into one or two large storage "trunks" or pack them in one corner of the garage. You are not ready to leave home, then, unless that entire corner of the garage is in your car.

Include any tools, allen wrenches, connectors, battery chargers, and so forth, that you need. If these tools are something you borrow as needed from a home tool box, you will be happier buying a duplicate to keep in your observing "kit."

Some "equipment" things you may not have considered: a section of outdoor carpeting to cover the ground; some 8x8 inch squares of plywood to hold your tripod legs steady in the soft sand; and, a small table and a lawn chair to set near your scope.

Unless you plan to spend the evening using OP Equipment ("Other People's"), you will want a star chart, an observing list, or maybe a laptop (with a red filter for the screen) with a good planetarium program.

Goat Mountain Astronomical Research Station



FACILITIES/PARKING

The site has two small houses with bathrooms, kitchens, and bedrooms. There are no RV hookups, but the telescope field and parking areas are graded and relatively level. You are welcome to set up tents adjacent to your vehicle and/or telescope. Limited 120V AC power is available on the telescope field for scopes, computers, battery chargers, etc.

Users should be aware that the desert sand does not pack well and care should be taken that one does not drive through soft sand. Please keep your vehicle adjacent to the telescope field or other "developed" areas. Parking is available in designated areas. Do not park near observatories. Parking adjacent to pads is reserved for the pad users. Park on hardpacked sand, but keep roads clear.

If you must leave early, please park facing the exit so you do not have to use your "backup" lights.

LOCKS/NOTICE/RESERVATIONS

You may visit GMARS whenever you like, Star Party weekend or not, without notice or reservations. However, the houses have locked fences that will be open only when an RAS member who holds a key is present. There is typically no access to the houses and bathrooms, except during Star Parties and other special events.

PETS

Pets are welcome during the day, but should be under control. Whether they should be on the telescope field at night depends on how well they behave, but they would probably be happier someplace else.

CLOTHES

When the sun goes down at a winter star party, temperatures can fall past freezing in a matter of hours. Therefore it is essential to bring plenty of layers of warm clothes. Include long johns, a hat, parka, and gloves for the night. Warm gloves, particularly those made so that you can uncover your fingers to manipulate the focuser knobs and such, are useful. (And if you do happen to forget the warm clothes, there are three "Loaner" parkas in the house!!!!). Rely on wool, silk, or poly underwear, down for the parka, and plenty of layers and bulk to insulate. Dress warmly from the beginning of the evening. Once the body gets cold, it is hard to get your body temperature back to a comfortable level. Your feet will be happier with a good set of shoes than with sandals.

Goat Mountain Astronomical Research Station

OVERNIGHT

If you are staying the night, bring what you need for sleeping while camping: tent, air mattress, sleeping bag, to name a few things. Leave your white-light lantern at home. Or, you could stay in the house. All you need is a sleeping bag (we have six bed or couch spaces) and maybe an air mattress. RVers can just drive over. We have plenty of space, but no hookups or dump facilities. Light-proof your windows with some opaque material. Overnighters should include a couple of earplugs and perhaps an eye-shade.

As for other personal items, a toothbrush and paste is about all you will need. Don't expect a shower. The facilities are inadequate. A first aid kit and some simple medicines (Tylenol, etc.) are available, but of course you should bring any special medicine, eye care, or other personal needs.

For those regularly staying overnight, cubbies are available for a plastic storage containers with your sleeping bag and such between visits. **(Be sure to label your container and things**

ELECTRICITY

We have AC power on the field but you should bring along an extension cord, a six-plug power-strip, and whatever power "bugs" you need to run your equipment. Any extension cords should be routed with care so they do not become tripping hazards in the dark. "Public" power posts on the observing field are available for any member or guest for telescopes and/or computers. (But not for RV's!!!)



WEATHER and CANCELLATIONS

GMARS may have clear weather even as rainclouds are covering the Riverside area, and even as the weather link is reporting clouds in Landers. There is no adequate way to notify people of cloud-outs in the desert. You may call the site at (760) 364-1952 for weather conditions. GMARS Weather Link.

PADS and OBSERVATORIES

The pads and observatories at Goat Mountain were built through generous donations by many individuals of time, labor, and material. They belong to the club, and are licensed to back to individuals for an annual fee of \$150 (pads) to \$250 (observatories). When a vacancy occurs, the vacancy is filled through a lottery/waiting list system. For details on how to get a pad, see the Station Master.

Current licensees always have first "dibs" on pad use. On any night, including star parties, the pad will remain vacant and available for occupancy by the licensee until sunset. If the licensee is arriving late (after sunset), he or she should contact GMARS at 760-364-1952 and let someone know so the pad remains reserved for the licensee's use.

- If the licensee hasn't called, and it is after sunset, or if the licensee has notified GMARS that he/she WILL NOT be coming that evening, then any club member can use the pad for that evening only.
- A licensee can also directly authorize a fellow member, or a guest, to use his or her pad.
- If the licensee arrives the next day, before sunset, any temporary user must vacate the pad. If you choose to set up on an unused pad, realize that a pad licensee may show next day and you will have to move.

Two more "etiquette" issues need mention:

- Pad electrical outlets are for the pad licensees. Any "borrowing" must be with the agreement of the pad licensees — to just plug in without asking is not good manners.
- The parking spaces adjacent to the pads are for the use of the pad licensees only. Please respect the right of a pad licensee to be able to back up to his or her pad and unload equipment.



