# Desert Sky Observer

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NEWSLETTER OF THE ANTELOPE VALLEY ASTRONOMY CLUB, INC P.O. BOX 4595, LANCASTER, CALIFORNIA 93539-4595

The Antelope Valley Astronomy Club is a California non-profit Corporation Visit the Antelope Valley Astronomy Club website At <a href="https://www.avac.av.org">www.avac.av.org</a>
The A.V.A.C. is a Sustaining Member of The Astronomical League



#### **Up-Coming Events**

March 1: Messier Marathon, Crystalaire

March 2: New Moon

March 11: First Quarter Moon

**March 14: Monthly Club Meeting\*** 

March 18: Full Moon

March 24: Last Quarter Moon

March 29: Dark Sky Party, Crystalaire (Back-up date for Messier Marathon)

**Anytime:** *Observe* 

# President's Report

Terry Pedroza

We are starting to run long on our meetings, so we have set up a new schedule in order to keep meetings within reasonable time constraints. Here is the run down:

7:00: Start meeting

7:35: Finish business portion of meeting

7:35 - 7:45: Break

7:45: Speaker begins

8:35: Give ten-minute cue to speaker if they are not yet finished

8:45: Speaker finished, Jeremy and Doug begin

9:00: Close meeting

Sam Prestel, our Youth Advisory Group Chairman, will be holding his first meeting this month. Sam will meet with the youth of our club during the business portion of our meetings in the next room. We thought this might work best for all involved. I will have Sam address the youth just after I introduce first-time attendees. The youth then can go to the next room and have their meeting.

Doug and Jeremy are going to try to do a joint presentation on the night sky using the planetarium at the end of each meeting. We are doing all of this in an effort to get our members home at a decent hour and to get Jeremy out of the planetarium at a decent time after a long day.

<sup>\*</sup> Monthly meetings held at the S.A.G.E. Planetarium at the Cactus School in Palmdale on the second Friday of each month. The meeting location is at the northeast corner of Avenue R and 20<sup>th</sup> Street East. Meeting starts at 7 p.m. <u>Please note that food and drink are not allowed in the planetarium</u>. Monthly A.V.A.C. meetings are open to the public.

Jerry Prestel is our Lunar Observing Group Chairman and he would like to get the group rolling. He is going to start holding lunar observing group sessions as soon as possible (read: Another good excuse to get the telescope out). If you are interested in the Lunar Group, please see Jerry at the next meeting.

Friday, April 4<sup>th</sup> is the day that we are going to Mount Wilson. If you have not paid I'm afraid that you may have missed out. Currently we have one opening left. Mount Wilson can supply hot water, but that is about it. No adventure pass is required. Bring a chair, warm clothes, heavy jacket, food, coffee, and whatever else you may need. I have received four viewing lists to begin assembling our list for the evening. If you are going and don't want to miss that special object you have been dying to see you should get it to me or... who knows?

We are starting to get busy again, so lets all chip in and have a great time! See you at the meeting, and don't forget our next star party.

# Vice President's Report

Tom Koonce

It's Messier time again. Please join us at <u>Crystalaire</u> for the Messier Marathon. See the Club <u>website</u> for a map to the observing site.

I would like to congratulate Sarah Prestel for logging more than 70 Messier objects and earning her Messier Certificate. Great job, Sarah!

March's guest speaker will be none other than John Dobson. He spent nearly the entire summer traveling across Russia, talking about amateur telescope making with small amateur groups. I'm sure he will have many fascinating stories of his trip and talk a bit about his perspectives on cosmology. Please plan on attending this memorable club meeting. Bring your "Dobsonian" telescope and have John sign it.

On the subject of club speakers, our new policy of accepting donations toward the speaker's honorarium- through the use of the envelopes located by the Treasurer's table in the lobby- was somewhat successful. If you find a particular speaker interesting, PLEASE contribute right after the meeting by using one of the envelopes provided, and hand it to the Treasurer. If you place your name on the envelope, the Treasurer will give you a receipt at the next meeting. If you choose to be anonymous, that's OK too. This is the way we are able to encourage (and thank) the extremely HIGH caliber of speakers that the club is able to provide each and every month. The money offsets the price of gas and a meal, as they have usually driven up from LA, San Diego, or from even farther away.

In honor of the Messier Marathon, I thought I would include a brief biography of its namesake, Charles Messier (1730-1817). He was a French astronomer who developed an intense interest in comet hunting. While he had other achievements to his credit, this was his chief occupation during his long observing career. In this he was so successful that he probably observed half of the comets known in his time, thus he was known as "The Ferret of Comets." Back then, these were not considered "fightin' words." :-)

He discovered about twenty comets. It was to keep track of the star clusters and nebulae which might have otherwise confused him by their comet-like appearance that he began to catalog and describe them. In commenting on his catalog in later years, he frankly stated that he had compiled it in order to aid other comet hunters. There is a slight touch of irony in the fact that Messier's chief claim to immortality grew out of his efforts to rid himself of a nuisance to what, he felt, was his important life's work. As might be expected, Messier's telescopes were all modest instruments, none of them exceeding the capacity of telescopes amateurs can expect to own today.

Messier did not discover all the objects in his catalog and he never made any such claim. Many of the objects were called to his attention by his contemporaries, notably Pierre Méchain and that fact was always carefully noted. The catalog was published in several stages as additions were made to it- the first 45 entries being printed in 1771. In its classic form, it contained 103 entries. Studies of Messier's papers and correspondence suggested that another four to six objects should be added to bring the total to 110. As of this writing, under 2000 people have completed the formal Astronomical League Messier Club observation program in which all objects are observed, verified by a second observer and recorded.

# Dir. of Community Development

Debora Pedroza

There is an exciting trend starting off our new year and I hope it continues. On the average, our club has had 8-10 new people joining us for our club meetings. This means that people are hearing about us through many avenues (website, community events, schools, radio and from our own members themselves). The response from the new people has been very positive and enthusiastic. Through our many endeavors, we are getting more and more people excited about astronomy. Thank you!

Here is an update on what is currently happening. The 3<sup>rd</sup> Annual YEA Essay Contest is off and running. Volunteers from our club have personally contacted all of the schools. I do not know who was more excited, our volunteers or the personnel and students at the schools. It's pretty cool when you have volunteers asking for an increased workload. THANKS to Sam, Sarah, Joyce, Doug, Karin and Ron for your generous time and support. A SPECIAL THANKS goes out to Pat McCord for all of her hard work in working with the school district superintendents and for providing access to more materials when needed and for giving me moral support. Thanks, Pat!

The writing deadline is April 15<sup>th</sup>. If you know any 6<sup>th</sup>, 7th and 8<sup>th</sup> graders out there, ask if they have heard about the contest. Word of mouth is everything. Hey, did you happen to catch my hubby and I on the K-Mix Breakfast Club with Desiree on Wednesday, February 12? It was so much fun and Terry has such an incredible voice (I know, I sound like a wife).

Hooray! We now have volunteers to help with our local Spanish radio stations. I would like to acknowledge Lorena and George Durr for their generous offer to assist us. Thank you and welcome back to the club.

Here is a brief summary of what lies ahead. The Messier Marathon is on March 1<sup>st</sup> at the Crystalaire Country Club, starting at dusk. We will have a local star party during National Dark Sky Week with the Escapees RV Club (during the first week of April...details to come later when confirmed) Lastly, the club will be participating in the 2003 Poppy Festival during the weekend of April 26 and 27. This has been one of the club's favorite events. If you would like to participate or be involved in the planning committee, please let me know.

That is it for now. See you soon and take good care.

# Doug Drake's Planet Watch



Jupiter is high in the southern sky and unmistakably very bright. Jupiter is one planet that amateur astronomers can observe and study. One item of study is the great red spot (GRS.) You can observe the moment GRS is at Jupiter's central meridian (CM), a center-line drawn from North to South on the planet's disk as viewed from Earth. You might only see the GRS outline with no color, but using larger telescopes you may have a chance to see a very faint salmon color. Use a No. 21 Orange filter for large telescopes and a No. 15 Yellow for smaller telescopes. Try each one to find the best results. I have provided a list of days, and time, you should be able to observe the GRS at Jupiter's CM if the weather is permitting.

March	PST (p.m.)
04	08:28
06	10:06
09	07:36
11	09:14
13	10:53
16	08:22
18	10:01
21	07:31
23	09:09
25	10:47
28	08:17

Another item of study is observing one of Jupiter's moon's eclipse another moon during the next couple of months. I will present this information at our March club meeting. By the way, the eclipsing events are observed about every six years, so you will have to wait about another six years for the next opportunity.

<u>Saturn</u> still holds the *wow* factor any time you observe it. Look and see if you can detect just a glimpse of Saturn's shadow on the upper portion of the rings near the upper portion of Saturn's disk.

<u>Venus</u> is still our morning star in the east and becomes lower and lower as each week passes by.

The Sun is setting in our western sky right at the point of the Vernal equinox on March 20th. Look for the Sun to disappear on the western horizon just as the Sun is setting and observe the mountain it goes behind- you have just witnessed the point of the Vernal Equinox, just like the ancients did a long, long time ago, including our American Indians.

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# Sky Watching Helpful Hints



by Tom Koonce

### **Sky Measures**

Hold your fist at arm's length and sight past it with one eye. Your fist from side to side covers about 10° of sky. A fingertip at arm's length covers about 1°. The Sun and Moon are each ½° wide. The Big Dipper is 25° long. From the horizon to the point overhead (the zenith) is 90°.

There are finer divisions of angular measure. A degree is made up of 60 arcminutes, and each arcminute is divided into 60 arcseconds.

#### **Constellations and Stars**

The human mind has always attempted to fit patterns to complex arrangements of individual objects. Early man tried to impose order on the heavens by assigning names to perceived patterns of the brightest stars. The names not only depended upon an imagined shape made by 'connecting the dots', but also by the constellations in close proximity. An example can be when looking at the constellation Orion, The Hunter. One can imagine Orion with his arms and legs outstretched, three stars making up a belt, a sword dangling from the belt, and on a clear, dark night, even make out an arc of stars that represent Orion's shield. But just to the east of Orion and near his right foot, is the bright star Sirius. It takes more than a little imagination to see Orion's faithful dog at his feet, made up mostly by two primary stars in the constellation Canis Major. It takes a bit more imagination to see the rabbit Orion has slain in the constellation Lepus just to the South, below Orion's feet.

Most of the 88 constellations visible to us throughout the year are derived from ancient mythology. Andromeda, Perseus, and Hercules are well known examples. We have maintained many of the ancient names to this day and added new ones to fill in gaps. As our knowledge of the southern hemisphere skies increased during early ocean voyages of exploration, many new constellations had to be added. Today, the boundaries between the constellations have been rigorously established by professional astronomers. They are used for convenience only, to help scientists segment the sky into comprehensible, meaningful chunks. For example, it is more precise to say that Disneyland is in Anaheim than it is to say that it is in LA.

When attempting to learn the constellations, take the approach of learning one at a time, and learning each one well before moving on to the next. Going out with a star chart or a planisphere for several nights in a row will give you confidence that you can translate the little star dots on the charts to the vastness of the constellations in the night sky. Each month, the sky "advances" 30 degrees to the west\*, with the next season's constellations rising earlier and earlier. From our latitude, you will see Orion high overhead at 9:00 PM on February 1, 60 degrees above the western horizon at 9:00 PM on March 1, and only 30 degrees above the western horizon at 9:00 PM on April 1.

\*Note: 12 months x 30 degrees / month = 360 degrees



# **Seven Strangers?**

by Dr. Tony Phillips

At the dawn of the space age some 40 years ago, we always knew who was orbiting Earth or flying to the Moon. Neil Armstrong, Yuri Gagarin, John Glenn. They were household names- everywhere.

Lately it's different. Space flight has become more routine. Another flight of the shuttle. Another visit to the space station. Who'sonboard this time? Unless you're a NASA employee or a serious space enthusiast, you might not know.

Dave Brown, Rick Husband, Laurel Clark, Kalpana Chawla, Michael Anderson, William McCool, and Ilan Ramon.

Now we know. Those are the names of the seven astronauts who were tragically lost on Saturday, February 1st, when the space shuttle Columbia (STS-107) broke apart over Texas.

Before the accident, perhaps, they were strangers to you. But if that's so, why did you have a knot in your gut when you heard the news? What were those tears all about? Why do you feel so deep-down sad for seven strangers?

Astronauts have an unaccountable hold on us. They are explorers. Curious, humorous, serious, daring, careful. Where they go, they go in peace. Every kid wants to be one. Astronauts are the essence of humanity.

They are not strangers. They are us.

While still in orbit Dave Brown asked, jokingly, "do we really have to come back?" No. But we wish you had.

Please see the NASA Home Page (<a href="http://www.nasa.gov">http://www.nasa.gov</a>) for more information on the Columbia Investigation.

# Did you know?

Gullies on the surface of Mars are now believed to have been created by melting snow packs.

**Desert Sky Observer** 



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Starry Night Backyard program. paid \$54.00 including shipping asking \$40.00 o.b.o.; Starry Night Pro, Version 3.1 asking \$100.00 Call Al Shoomliansky at 945-8900

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8" Orion Dobsonian, specs available on Orion <u>website</u>, includes 2x GS barlow. Excellent condition, \$400 firm. To purchase or make inquiries, call Steve Weaver (760) 373-2872.

\* \* \* \* \*

# Astronomy Links on the Web

http://pages.prodigy.net/sstrott/

(Steve Trotta's website)

http://www.astro-tom.com/

(Tom Koonce's website)

http://www.projectsandhobbies.com/howtolearnastronomy.htm

(Getting started in Astronomy...)

http://www.physics.sfasu.edu/astro/jupiter.html

(everything Jupiter)

http://antwrp.gsfc.nasa.gov/apod/archivepix.html

(Astronomy Picture of the Day)

http://www.avac.av.org/

(Hey, that's us! So go there!)



# A.V.A.C. Membership Information

Membership in the Antelope Valley Astronomy Club is open to any individual. The Club has three categories of membership.

- Family membership at \$30.00 per year.
- Individual membership at \$25.00 per year.
- Junior membership at \$15.00 per year.

Membership entitles you to...

- Desert Sky Observer–monthly newsletter.
- The Reflector-the quarterly publication of the Astronomical League.
- The A.V.A.C. Membership Manual.
- To borrow club telescopes, binoculars, camera, books, videos and other items.

The Desert Sky Observer is available as a separate publication to individuals at a cost of \$10.00 per year. Subscription to the Desert Sky Observer does not entitle the subscriber to membership in the Antelope Valley Astronomy Club and its associated privileges.

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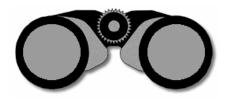
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#### A Look Ahead...



# **April Calendar**

April 11: Club Meeting, S.A.G.E. Planetarium; Tom Koonce, speaker

# **May Calendar**

May 3: Dark Sky Party, Mt. Pinos

May 9: Club Meeting May 23-25: RTMC

May 31: Dark Sky Party

# Our Sponsors

<u>Al's Vacuum and Sewing</u>: 904 West Lancaster Blvd. (661) 948-1521. Stop by and say "hey" to Matthew and Suzanne.

<u>King Photo</u>: 749 W. Lancaster Blvd. (661) 948-8441. As a telescope dealer, they always support the AVAC. Stop by and say "hey" to Stokely.

**QNET:** 1529 E. Palmdale Blvd., Suite 200. (661) 538-2028. As an Internet provider, they are kind enough to provide us with a free website.

<u>Darkrooms Plus</u>: 20th St. W. near Pep Boys in Lancaster. (661) 945-1444. They offer all club members a 10% discount on all purchases. Stop by and say "hey" to Dean or Hank.

<u>V106.3 Radio</u>: Please welcome our newest sponsor, who assists in advertising our Club.

# Thanks for your generous support!



Club President Terry Pedroza addresses a standing-room only gathering at the recent Prime Desert Woodlands event.