Desert Sky Observer

Volume 21 Issue 8 **August 2001**

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 Web Site At www.avac.av.org
The A.V.A.C. Is A Sustaining Member Of The Astronomical League

Up-Coming Events

August 4: Full Moon at 5h 56m UT.

August 10: Monthly meeting, held at the S.A.G.E. Planetarium at the Cactus School in Palmdale. The meeting location is at the northeast corner of Avenue R and 20th Street East. Meeting starts at 7 p.m. Please note that food and drink are not allowed in the planetarium. Monthly A.V.A.C. meetings are open to the public.

The August presentation will be an astronomy question and answer session hosted by Club members.

August 11: Star Party at Poppy Reserve. Located 15 miles west of Lancaster on Ave. I. The entrance is to the right and 6:30 or 7:00 p.m. is set up time. Contact Errol Van Horne.

August 12: Last Quarter Moon at 7h 53m UT.

August 18: Dark Sky Star Party and pot luck at Steve Trotta's house. There is swimming too. This is a members only event.

August 19: New Moon at 2h 55m UT.

August 25: First Quarter Moon at 19h 55m UT.

September 14: Monthly Club meeting.

Anytime: Observe.

President's Report

Doug Drake, Sr.

This is the best of time of the year. Do you know why? We are looking forward to watching, observing and sharing the heavenly sky above us. And, the only requirement to outer space is our imagination. We can listen to someone describing the magnificent wonder of the night sky, we can see with our very own eyes, or we can look though binoculars or telescope. Indeed, how lucky we are.

The magnificent Perseid meteor shower that peaks August 12th (a Sunday) is sure to delight us. Just look in the NE direction of the night sky, close to midnight and thereafter (Perseus is just below and a little left of Cassiopeia).

This is the time of the year we can also see our beautiful Milky Way arching over us as we are viewing the very edge of our own galaxy. This is the opening curtain to the night sky. Take your binoculars or telescope and spy out little fuzzy objects along, and just off, the Milky Way and discover they are really gas nebulas and cluster of stars.

Continue reading, your Board Members have some exciting news for you. I know, because they are the best ever.

Vice-President's Report

Terry Pedroza

The AVAC picnic was a wonderful success! We had approximately 35 members in attendance, beautiful skies, and a great time. We had a raffle, a silent auction, gorgeous weather and superb viewing conditions. Brian Peterson was kept busy at the grill, as were Matt Leone and Matt Leone Jr., Thanks guys for a great meal. Tom Koonce and Doug Drake helped with the raffle and the auction. I want to thank all the members that brought food and helped with set up, clean up and everything in between. This was your picnic and it was **YOUR SUCCESS.** I would like to give a special **THANKS** to Matt Leone for setting this event up.

Next month's star party will be at the California Poppy Reserve for the Perseid Meteor Shower. We were invited to be there by Ranger Robert McKnight from Saddleback Butte and are hoping for a great turnout. Please plan to attend.

Don't forget that elections are coming up in October. If you might be interested in running for office, see one of the board members for more info.

August's presentation will be a question and answer forum with a brief presentation on "Star Party Etiquette". Afterwards we will have Jeremy's wonderful sky tour.

Secretary's Report

Tom Koonce

Minutes of the Antelope Valley Astronomy Club
Regular Club Meeting July 13, 2001

Call To Order:

Doug Drake, President, called the meeting to order at 7:00 pm. Doug welcomed visitors and our newest members.

Vice President's Report:

Terry Pedroza, our V.P. discussed our upcoming star party calendar, the new club telescopes that the club library has for members to check out. He also had Matt Leone come forward to talk about the Annual Club Picnic, to be held this year at Crystalaire Country Club.

As Messier Group Chairman, Terry informed the club that Matt Leone is the first person in the AVAC to have observed and documented all of the Messier objects. In addition, Dave Allen, Bill Ellison, and Steve Trotta have observed in excess of the 70 Messier objects required by the Astronomical League, and will receive their Messier Pins!

New Business:

Debora Pedroza, who served as Chair of the Club's first annual Y.E.A. Essay Contest for Antelope Valley youth, presented the winners with a (very impressive!) personalized certificate from Senator Pete Knight, a certificate from the AVAC, a Club Jacket and a Club Hat with their first name embroidered upon it. The students will also receive a tour of JPL and of Griffith Observatory. Winners were as follows:

- **6th Grade**
  - *Andrew La Riva*
  - *Jonathan Diaz*
- **7th Grade**
  - *Caroline Vellios*
  - *Kaleb Diaz*
- **8th Grade**
  - *Virginia Scott*
  - *Irvin Scott*

Doug Drake thanked Debora, her entire volunteer team, and Errol Van Horne as Chairman of the Community Outreach Committee for the hard work and numerous hours of personal time that they put into making the contest a success.

Break: 7:30 pm

Speaker: 7:45 pm

Our guest speaker, Ted Ayers, spoke about the upcoming SOFIA infrared Observatory, missions that he had flown on its predecessor, and the long-term value of infrared astronomy to cosmological science. He answered numerous questions at the end of his talk and everyone enjoyed the presentation.

Jeremy Amarant, S.A.G.E. Planetarium Director, gave a 10 minute "Star Talk" using the planetarium to guide members through many constellations in the northern and mid-latitudes that was well received. He spoke in particular about the Solar System's largest asteroid, Ceres, and its path through Sagittarius, as well as Comer LINEAR's naked-eye visibility in Pegasus.

Close of Meeting:
The meeting was adjourned at 9:05 pm.

Minutes written and respectively submitted to the Executive Board, July 20, 2001.

AL-Cor Report

Tom Koonce

As the Astronomical League Coordinator, I am very proud to announce the name of the first person in the Antelope Valley Astronomy Club to have completed the documented observation of all of the deep-sky Messier objects! Matt Leone takes the honor of meeting all of the Astronomical League's criteria for a Messier Pin to be awarded to him in the near future. This is quite an accomplishment! Please join me in congratulating Matt the next time you see him on a job well done! (Next: The Caldwell Catalogue Matt?)

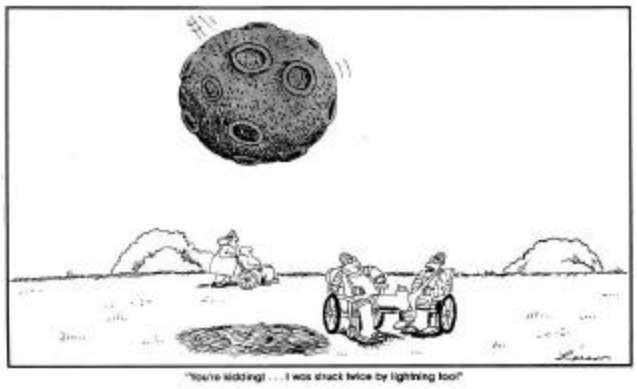
I have been informed by our esteemed Messier Observing Group Chairman that recently three additional Club members have now met the criteria of at least 70 Messier objects observed and documented (all of them **significantly** over the 70 required!). Please join me in congratulating Dave Allen, Bill Ellison, and Steve Trotta on their completion of their Messier Certificates; to be awarded after the Astronomical League has processed their log sheets.

In The News

Here are coordinates for Comet Linear, C/2001 A2, for the month of August.

Date	RA2000	Dec.	Elong	Mag	Const.
0h UT	h m	° '	°		
Aug 1	20 50.4	+21 16	141	7.8	Vul
Aug 6	20 35.8	+21 24	141	8.3	Vul
Aug 11	20 24.7	+21 11	141	8.7	Vul
Aug 16	20 16.4	+20 45	140	9.1	Sge
Aug 21	20 10.3	+20 10	138	9.5	Sge
Aug 26	20 06.1	+19 31	136	9.9	Sge
Aug 31	20 03.4	+18 50	133	10.3	Sge

Humor



"You're kidding! . . . I was struck twice by lightning too!"

"You're kidding!…I was struck twice by lightning too!"

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 $25.00 per year.
- Individual membership at $20.00 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 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.

A.V.A.C. Board Members

President: Doug Drake (661) 266-2202 - ddrake@hughes.net
Vice-President: Terry Pedroza (661) 949-6975 - thunder.struck@verizon.net
Secretary: Tom Koonce (661) 943-8200 - takoonce@aol.com
Treasurer: Steve Trotta (661) 269-5428 - sstcomp@qnet.com
Member At Large: Errol Van Horne (661) 943-8454 - ejvan@hughes.net

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Our Sponsors

Al's Vacuum and Sewing: 904 West Lancaster Blvd. They can be reached at (661) 948-1521. Stop by and say hi to Matthew and Suzanne.

Darkrooms Plus: 20 St. W. near Pep Boys in Lancaster. They can be reached at (661) 945-1444. Darkrooms Plus offers all club members a 10% discount on all purchases. Stop by and say hi to Dean or Hank.

King Photo: 749 W. Lancaster Blvd. They can be reached at (661) 948-8441. As a telescope dealer, they always support the AVAC. Stop by and say hi to Stokely or Paul.

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

Vista Golf: 43517 N. 13th Street West, Lancaster. They can be reached at (661) 945-7003. Thanks for your generous support.

Antelope Valley Astronomy Club, Inc.

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Lancaster, CA 93539-4595
e-mail: info@avac.av.org
website: www.avac.ac.org

Monthly Meeting: August 10.

Planets at Dusk: Mars, in S at dusk, is the brightest evening "star" at mag –1.5 to –0.9. The red planet widens its distance east of the similarly-colored first-magnitude star Antares, "Rival of Mars" and heart of the Scorpion, from 6.5° on Aug 1 to 16.5° on Aug 31. (Compare Mars' positions in boxes for Aug 1-4, Aug 25-28.) Telescopes show **Syrtis Major,** most prominent dark marking on Mars, in best view as planet passes due south on Aug 19 for E Coast, Aug 23 for W Coast, Aug 27 for Hawaii. But overhead at lat 27° S, the planet is very low in south from northern U.S., and telescopic observers will have to wait for moments of good "seeing." **Mercury** can be spotted very low in W in twilight last few days of month. During this very poor appearance, binoculars are useful to help pick out Mercury in bright twilight, especially from N states. From S states, it sets longer after sunset and is more easily seen.

Planets at Dawn: Venus, most brilliant planet at mag –4, rises in ENE nearly 3 hours before sunrise and is in E at dawn. **Bright Jupiter** (mag –2) begins month 4.5° lower left of Venus. Climbing in eastern sky as month progresses, Jupiter appears about 1.3° upper left of Venus on Aug 5 and 6, then 1.8° above Venus on Aug 7, and to its upper right thereafter. Venus and Jupiter are 5° apart on Aug 11; then as Venus moves eastward, their separation widens by 1° per day, to 25° at month's end. Venus and Jupiter are shown or described in boxes for Aug 1, 2, 4-8, 10, 11, 15-18, 21, 26, 31. Zero-magnitude **Saturn** appears as the brightest "star" in Taurus, 4.5° to 6° from first-magnitude Aldebaran. Climbing higher in SE as month progresses, Saturn is 22° to 26° W (upper right) of Jupiter. Saturn is shown in boxes for Aug 2, 6, 12-14. **Saturn's rings:** See Aug 27.

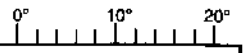
Can you see **opposing crescent Moons** (old and young) on consecutive days? Even with binoculars, it won't be easy, but favorable circumstances make it possible on Aug 18 and 19; see those dates on calendar.

Planetarium business office:
(517) 355-4676
Skywatcher's Diary on World Wide Web:
http://www.pa.msu.edu/abrams/diary.html

SKY CALENDAR AUGUST 2001

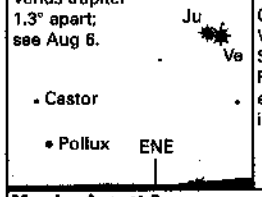
An aid to enjoying the changing sky

Use this scale to measure angular distances between objects on diagrams below.



SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

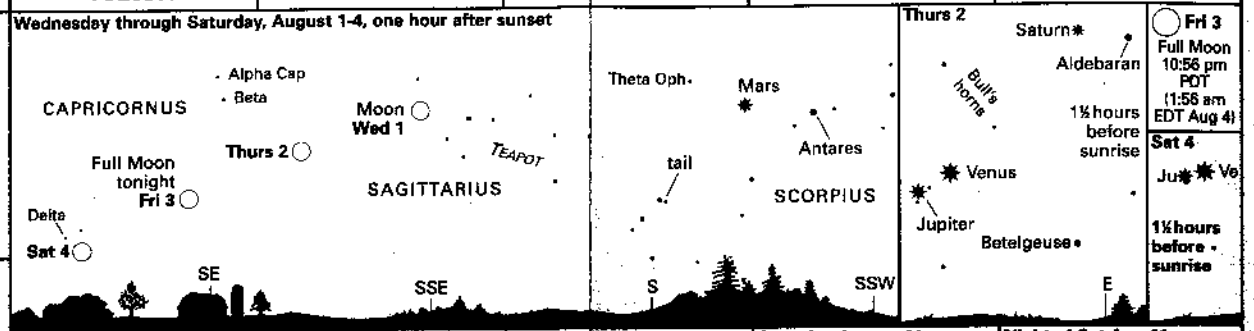
Sunday August 5, 1½ hours before sunrise: Venus-Jupiter 1.3° apart; see Aug 6.



Wednesday August 1, one hour before sunrise:

Compare separations of Venus-Jupiter, Saturn-Aldebaran, Pollux-Castor each pair of objects is 4½° apart.

Wednesday through Saturday, August 1-4, one hour after sunset

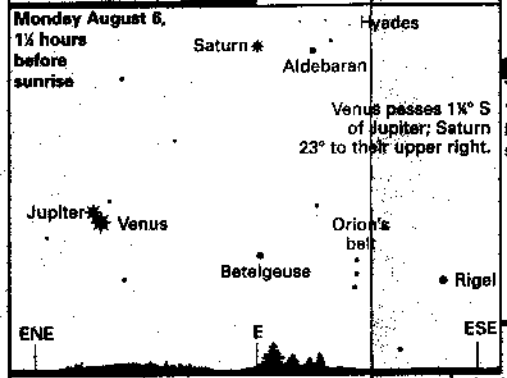


Thurs 2

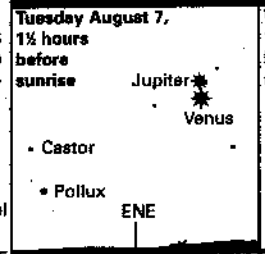
Fri 3 Full Moon 10:56 pm PDT (1:56 am EDT Aug 4)

Sat 4

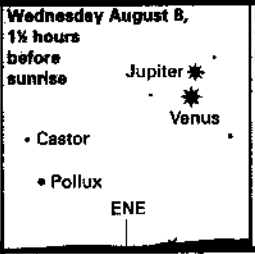
Monday August 6, 1½ hours before sunrise



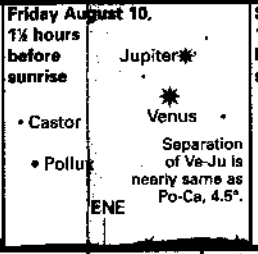
Tuesday August 7, 1½ hours before sunrise



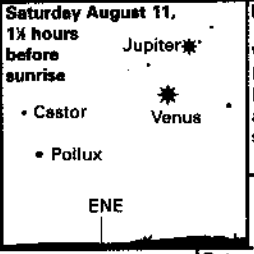
Wednesday August 8, 1½ hours before sunrise



Friday August 10, 1½ hours before sunrise



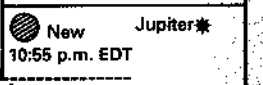
Saturday August 11, 1½ hours before sunrise



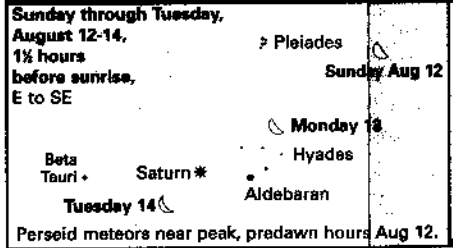
Night of Sat Aug 11

Watch for **Perseid meteors,** but halflit Last Quarter Moon rises about 4 hours after sunset, somewhat spoiling the view.

New 10:55 p.m. EDT

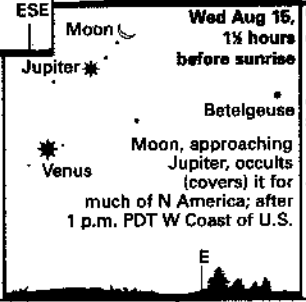


Sunday through Tuesday, August 12-14, 1½ hours before sunrise, E to SE



Perseid meteors near peak, predawn hours Aug 12.

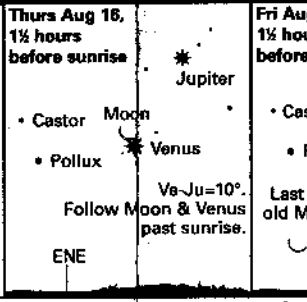
Wed Aug 15, 1½ hours before sunrise



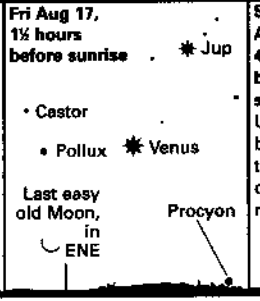
Wednesday Aug 15, evening hours:

Mars is now 10° east of Antares; see star map, *August Evening Skies,* over. Uranus (mag 5.7) at opposition, 2.0° NW of 3rd-mag Delta Capricorni and 0.6° S of 5.2–mag 42 Cap.

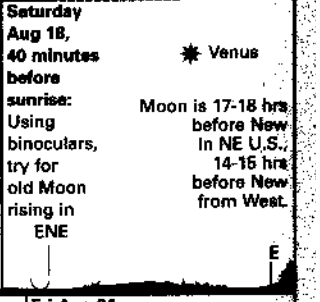
Thurs Aug 16, 1½ hours before sunrise



Fri Aug 17, 1½ hours before sunrise

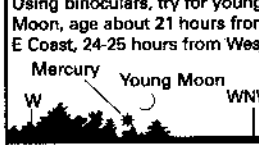


Saturday Aug 18, 40 minutes before sunrise: Using binoculars, try for old Moon rising in ENE

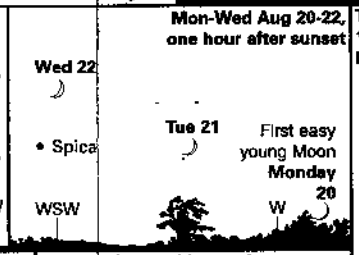


Sunday, August 19
Moon at perigee 2 a.m. EDT, three hours after New.

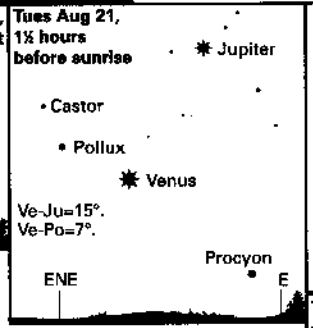
25 minutes after sunset: Using binoculars, try for young Moon, age about 21 hours from E Coast, 24-25 hours from West.



Mon-Wed Aug 20-22, one hour after sunset



Tues Aug 21, 1½ hours before sunrise

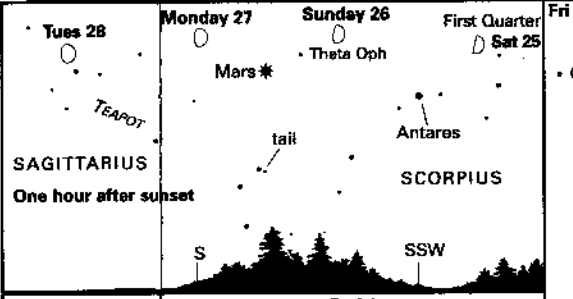


Tues 28

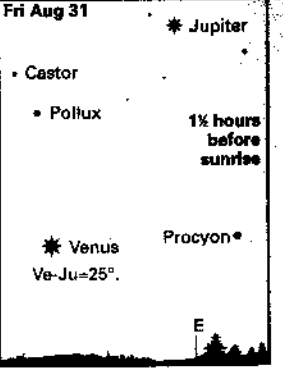
Monday 27

Sunday 26

First Quarter Sat 25



Fri Aug 31



Sunday Aug 26, morning: Jupiter and Saturn, 25° apart, are respectively 20° and 45° upper right of Venus. Venus-Pollux-Castor lie in straight line. Compare Aug 21 and 31.

Monday August 27, morning: In late August and early September, Saturn's rings are tipped 26.2° from edge-on, the greatest for this year. Saturn's shadow upon the rings gives the scene a striking 3-D appearance.

Tuesday August 28, evening: Mars 15° E of Antares.

Thursday August 30, dusk: Mercury setting in W, 25° lower right of Spica; easier from S states.

Robert C. Victor, Patti Toivonen
ISSN 0733-6314

Subscription: **$10.00 per year, starting anytime, from *Sky Calendar,* Abrams Planetarium, Michigan State University, East Lansing, MI 48824**

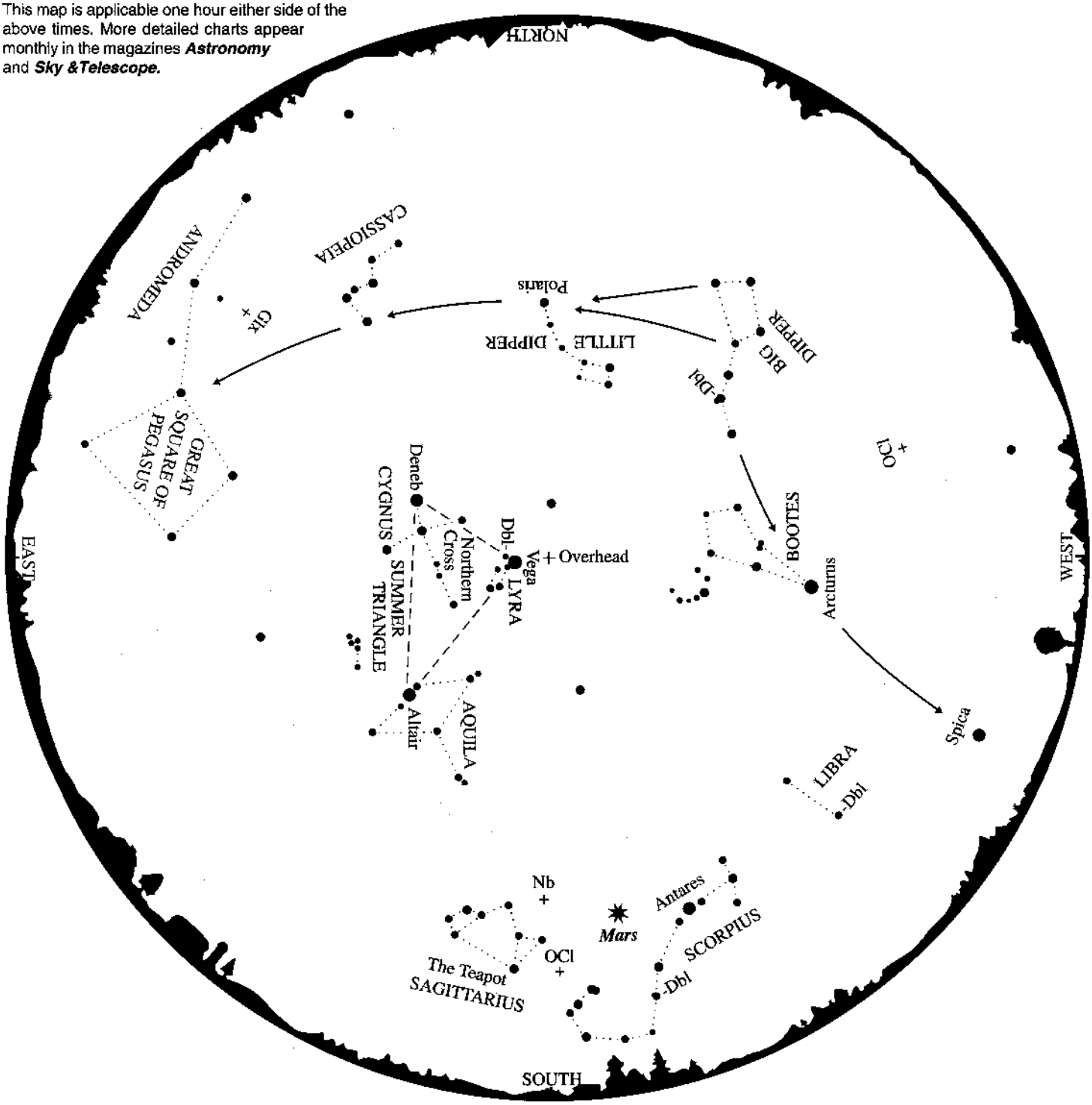
August Evening Skies

This chart is drawn for latitude 40° north, but should be useful to stargazers throughout the continental United States. It represents the sky at the following local daylight times:

Late July	11 p.m.
Early August	10 p.m.
Late August	9 p.m.

This map is applicable one hour either side of the above times. More detailed charts appear monthly in the magazines ***Astronomy*** and ***Sky &Telescope.***

Subscription: $10.00 per year, from ***Sky Calendar***, Abrams Planetarium, Michigan State University, East Lansing, MI 48824-1324.



The planet Mars is plotted at map time, mid-August 2001. Seven objects of first magnitude or brighter are visible. In order of brightness they are: Mars, Arcturus, Vega, Altair, Antares, Spica, and Deneb. In addition to stars, other objects that should be visible to the unaided eye are labeled on the map. The double star (Dbl) at the bend of the handle of the Big Dipper is easily detected. The double star in Scorpius is somewhat harder. Much more difficult is the double star near Vega in Lyra. The open or galactic star cluster (OCl) known as Coma Berenices, "The Hair of Berenice," is located between the horizon and Bootes. A more compact open cluster is located between Sagittarius and the "tail" of Scorpius. Nearby, marked (Nb) above the "spout" of the "teapot," is the Lagoon Nebula, a cloud of gas and dust out of which stars are forming. The position of an external star system, called the Andromeda Galaxy, is also indicated (Glx). Try to observe these objects with unaided eye and binoculars.

—D. David Batch