Astro Chatter
by Larry Kalinowski

A planet that was discovered by The European Southern Observatory in Chile, has a very good possibility of harboring life. It circles the red dwarf star Gliese 581. Until just a few years ago, red dwarfs weren’t even considered for life holding planets. Another case of short sightedness that expects our solar system to be typical. A special spectrograph that has the capability of measuring different spectral shifts at different wavelengths has detected this planet. It’s five times heavier than the Earth and has a temperature range that favors the existence of liquid water. At 20.5 light years, it’s hardly a hop, skip or jump away from the Earth, but it has the astronomical world raising its eyebrows.

One of the best talks ever given at MCCC last month was one delivered by Dr. Gary Ross. The Ross style of delivery held everyone glued to attention. It wasn’t recorded for our archives but it certainly should have been. If you missed it, too bad, All I can tell you is his road map to intelligent life is a long, rough one, with many pitfalls along the way. He feels SETI is on one of those pitfall roads and shouldn’t depend on ordinary radio frequencies for establishing contact, even though the attempts are noble ones. His favorite frequencies for life detection are in the Infrared and supports the new Webb telescope with enthusiasm.

During the last Cranbrook meeting, a brief mention was made about a badge award system. Let me tell you a little more about it. The awards are designed to encourage more observing among WAS members. Similar to the Astronomical League awards, a minimum of documented observations are required for each badge. For instance, 25 Messier observations are required for the first badge, which is much lower than the League’s 75. There are minimum requirements for Solar and Lunar eclipses, planets, asteroids, meteors, NGC objects, Caldwell objects, Herschel objects, comets, double stars, variable stars, and astrophotography. Those requirements will be
discussed at further meetings. Even more important is the fact that any kind of instrumentation can be used. That means cameras, digital circles and go-to telescopes are allowed. I want to make it as easy as possible for these awards to be made. I feel that observing should not depend on memorization of the starry sky. It’s more important to scrutinize the object you’re observing than trying to memorize where it’s located. I’d like to see every member win at least one badge in any category and be proud to wear it on a club jacket or shirt. They would be very impressive to the public and other clubs. Past documentation is allowed for credit, so if you have some, give it or show it to our sub-group chairmen as soon as possible. That’s Marty Kunz (solar), Alan Rothenberg (Lunar, planetary and double stars), Phil Martin (deep sky) and Larry Kalinowski (comets). They will be responsible for checking your qualification and contacting me to produce the badge. One more thing, You are not confined to your own telescope, or your own binoculars when making observations for credit. You can use anyone else’s instrument, even if you are casually attending a public star party, as long as you keep proper records of observation. Presentation of the award badges will be made by the sub-group chairmen at any monthly meeting.

The first award badge was presented to Ken Bertin at the last Macomb meeting. Ken more than qualified for his first solar eclipse badge after presenting photographic evidence of eight total eclipses, three annular and six partials. He is an enthusiastic eclipse chaser, well deserving of the award.

The May issue of Sky and Telescope lists 25 colorful double stars for Spring that might interest backyard observers. See page 71. Just what you need to win the first double star badge award.

Two comets are near the Earth this month. Comet Lovejoy and Comet Enke. Both are just under naked eye visibility (seventh magnitude) and should be easily seen in a six inch telescope, provided the sky cooperates.

Stereo photos of the Sun can now be found on all the solar information sights around the internet. Coronal holes seem to show the best stereo depth.

The attendance for last month’s Discussion Group meeting hit fourteen again. Items discussed were the new planet found around Gleise 581, Stephen Hawking’s ride in an airplane that simulates a gravity free environment, the two hundred inch Palomar mirror, florescent lamps and the Large and Small Magellenic clouds. Brian Klaus and the Gathens provided refreshments.

May’s discussion/computer group meeting will be on the fourth Thursday, the 24th, at Gary Gathen’s home in Pleasant Ridge. He lives at 21 Elm Park Blvd., three blocks south of I-696 and about a half block west of Woodward Ave. Meeting will start at 8:00 PM. You can reach Gary at 248-543-3366, or me, at 586-776-9720 for any further information.

All space photos are courtesy of SPACE.COM and SPACEWEATHER.COM, unless otherwise noted.

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THE SWAPSHOP

This column is for those who are interested in buying, trading or selling items. Call 586-776-9720 (cometman@mybluelight.com) if you want to put an item for sale or trade in this section of the WASP. The ad will run for six months. The month and year, the ad will be removed, is also shown.

FOR SALE. A nice Orion SkyQuest XT8 Intelliscope. The scope is in great condition and well taken care of. Orion's Object Locator, with holster, comes with the scope, as well as two rechargeable 9V NiMH batteries and a 10mm Sirius Plossl eyepiece. All the encoders on both axis' are also installed. The batteries were only used about five times but they hold a good charge. The scope has a 9X50 achromatic finder. There are two nice aluminum focus wheels installed on the two inch Crayford
focuser. A cooling/warming fan has been placed on the bottom of the mirror cell to stabilize the scope’s temperature. The fan runs from a 12 volt field battery or AC adaptor. All user’s manuals are included. I’m selling this Orion XT8 to aim towards another scope. I need portability, ability for tracking and for astrophotography. You can give a best offer for this scope. Contact Michael Robacker at MBRobacker@hotmail.com or call 248-398-7010. (9-07).

WAS SUB-GROUPS

Want to delve more deeply into a specific field of interest in astronomy? Joining a sub-group just may be the answer. Please contact the chairperson listed by the subgroup of interest for more information, meeting times and location. Current sub-groups are:

Discussion/Computer Group - Larry Kalinowski
Lunar/Planetary/Double Stars - Alan Rothenberg
Deep Sky Group - Phil Martin
Solar Group - Marty Kunz
Hands on Group - Riyad Matti

WAS Meetings scheduled for 2007

Cranbrook Meetings – Every 1st Monday
May 7 June 4 July 2 Aug. 6
Sep. 3 Oct. 1 Nov. 5 Dec. 3

Macomb Meetings – Every 3rd Thursday
May 17 June 21 July 19 Aug. 16
Sep. 20 Oct. 18 Nov. 15
Dec. 20 (Banquet Date)

Warren Astronomical Society
2007 presentations

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<td>17-May</td>
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| 19-July | Thurs | Norman Dillard | Astronomy in the Points |
| 6-Aug   | Mon   | Philip Martin  | Evolution, the Real Science |
| 16-Aug  | Thurs | Larry Phipps  | Of Belts and Clouds |
| 3-Sep   | Mon   | Ken Bertin   | TBD |
| 20-Sep  | Thurs | Dave D’Onofrio | Backyard CCD imaging from the city. |
| 1-Oct   | Mon   | Dale Partin  | The Hubble Constant |
| 18 Oct  | Thurs | Guy Maxim    | TBD |
| 5-Nov   | Mon   | John Lines   | 7 Ponds Nature Center (TBD) |
| 15-Nov  | Thurs | Larry Kalinowski | “Let Me Demonstrate” |
| 3-Dec   | Mon   | Alan Rothenberg | TBD |
| 20-Dec  | Thurs | Banquet | |

Please contact the 1st V.P. (program chairperson) to:

1 : Schedule new presentation.
2 : Alter scheduled presentations.
3 : Add a subject title to your presentation.
4 : Change the subject title of your presentation.

Thank you for your support,

Riyad I. Matti
W.A.S. 1st V.P. (program chairperson) 2006/2007

May, 2007 Calendar

Wednesday, May 2 • 6:09 a.m.: Full Moon; Midnight: Mercury is in superior conjunction
Friday, May 4 • 2:00 p.m.: The Moon pasts 0.5° south of Antares
Saturday, May 5 • Eta Aquarid meteor shower peaks (weak here – best southern hemisphere); 8:00 a.m.: The Moon passes 6° south of Jupiter
Thursday, May 10 • 12:27 a.m.: Last Quarter Moon; 4:00 a.m.: The Moon passes 1.8° south of Neptune
Saturday, May 12 • 3:00 a.m.: The moon passes 1.3° north of Uranus; 9:00 p.m.: The moon passes 3° north of Mars
Tuesday, May 15 • 11:06 a.m.: The moon is at perigee (23,315 miles from Earth)
Wednesday, May 16 • 3:27 a.m.: New Moon
Thursday, May 17 • 8:00 p.m.: Moon passes 3° north of Mercury
Saturday, May 19 • 10:30 p.m.: Venus passes ¾° South of Moon’s edge.
Tuesday, May 22 • 3:00 p.m.: The Moon passes 0.8° north of Saturn
Wednesday, May 23 • noon: Moon passes 0.7° north of Regulus; 5:03 p.m.: First Quarter Moon
Sunday, May 27 • 6:02 p.m.: The Moon is at apogee (251,941 miles from Earth)
Wednesday, May 30 • 10:00 a.m:Vesta is at opposition
Thursday, May 31 • 9:00 p.m.: The Moon passes 0.4° south of Antares; 9:04 p.m.: Full Moon

2007 Stargate Observatory Open House Schedule

April 21st, May 19th...NOTE this will most likely be adjusted as this is the same day as the Skies over Clarkston NOTE that there are two events this month:
July 7th Club Picnic starting at noon (closed to public), July 21st Normal open house date. Aug 11 Perseids watch. Pending open house dates are: Sept 15th, Oct 13th, Nov 10th and Dec 8th. Dependent of weather.

1. Normal closing time will depend on events, weather, and other variables.
2. The observatory may be closed one hour after opening time if no members arrive within the first hour.
3. Contact me for other arrangements, such as late arrival time.
4. An alternative person will be appointed to open the observatory if I cannot attend a scheduled date or opening time.
5. Members may arrive before or stay after the scheduled open house time.
6. Dates are subject to change or cancellation depending on weather or staffing availability.
7. An e-mail will be posted no later than 2 hours before starting time incase of date change or cancellation.
8. It is best to email me up to 2 hours before the posted opening with any questions you may have. I will not be able to receive e-mail after 2 hours before open time. Generally only strong rain or snow would prevent the open house...even if it is clouded over I plan on being there. Often the weather is cloudy but clears up as the evening progresses.

Bob Berta
W.A.S. 2nd V.P. (2007)
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Meeting Minutes

Warren Astronomical Society
Minutes of BOARD Meeting
April 2nd, 2007
Cranbrook

The meeting was called to order at 6:37 pm.

Attendance:
Norman Dillard, Marty Kunz, Dale Partin, Bob Berta, Riyad Matti, Stephen Uitti, Phil Martin

The treasurer’s report said that we had $5173.51
Approved.

The minutes from the March 5 and March 15 meetings were approved.

The next open house is moved to April 14, since it would have conflicted with National Astronomy Date activities on April 21.

Norm Dillard as WAS president approved that Phil Martin as treasurer could appoint Stephen Uitti to handle sales of club memorabilia.

There was a discussion of a speaker for the December banquet.

Stephen will look into putting the club handbook on the internet.

There was a discussion of a proposal by Larry Kalinowsky to provide observing badges to members who observe at least a certain number of objects in various categories.

The meeting was adjourned at 7:23 pm.

Respectfully submitted,
Dale Partin
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Warren Astronomical Society
Minutes of club meeting
April 2nd, 2007
Cranbrook

The meeting was called to order at 7:37 pm.

The officer and committee reports were given.

The treasurer’s report said that we had $5173.51

The next open house at Stargate will be on April 14th.

April 21st is National Astronomy Day. Members are encouraged to be at Cranbrook from 11am to 4pm, and then at Stargate in the evening.

“Stars Over Clarkston” will be on May 19th.

Some awards were given out for those who participated in Einstein Night at Botsford School. Many of the awards were hand made by appreciative students.

The club viewed two shows in the Cranbrook planetarium. One was entitled, “Stars of the Pharaohs”, the other was “The Future is Wild”.

38 people attended the meeting.

The meeting adjourned at 9:56 pm.

Respectfully submitted,
The meeting was called to order at 7:37pm.

The officer and committee reports were given.

Larry Kalinowski displayed a large variety of very nice badges he has made to give as awards for those who observe various categories of astronomical objects.

Upcoming astronomy star parties in 2007:

April 21 National Astronomy Day. Members are encouraged to be at Cranbrook from 11am to 4pm, and then at Stargate in the evening.

May 13 to 20 Texas Star Party

May 19 Stars Over Clarkston

June 13-17 Bill Beer’s Spring Star Party near Cadillac, MI

Gary Ross gave a presentation entitled, “We Are Constructively Alone.”

27 people attended the meeting.

The meeting adjourned at 10:04pm.

Respectfully submitted,
Dale Partin

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Moon Race: The History of Apollo
A review by Stephen Uitti

A four Video tape Series by Columbia River Entertainment Group
Donated to our club library by Guy Maxim

The four VHS tape video series, Moon Race: The History of Apollo, by Columbia River Entertainment Group, was donated to the WAS library by Guy Maxim. Thanks Guy! Each of the fourteen episodes takes a little under a half hour, with either three or four episodes per tape. One might expect that the total would be nearly seven hours of program, but the actual total is 5 hrs 23 minutes.

With little time to sit and watch TV, my view was combined with my daily exercise program. That's about a half hour per session, and so each episode fit well with one exercise session. If one episode were viewed per day, the entire set would take two weeks. So, naturally, it took over a month. Yet, this is total success compared with my diet program.

Taken as a whole, the entire program is very enjoyable. As a kid, I watched the events unfold. But much was forgotten, and this program, put together in 1993, goes into depth as only a retrospective can do. So, when an astronaut picks up a rock, the eventual research performed on that rock can be related. The only episode that turned me off was the very first one. But you might like it. Clearly, the goal was to set the tone of the mission in terms of aspirations of dreams fulfilled. It's very poetic. And, it shows highlights from the program. My objection is that it skips around in an unfocused and confusing way. For perspective, one of my ideas for fun is to perform endless math drills. Really. I'm currently performing multiplication on pairs of three digit numbers. Every day.

However, the rest of the episodes are very orderly, informative, and filled to the brim with actual footage of events as they happened. Most of time
you hear the astronauts or mission control, with fairly brief commentary by a narrator. My ten year old son was at the edge of his seat, wondering if the Apollo 14 astronauts were going to make it home. I didn't point out that the astronauts brought the still photos with them, and so, must have made it.

The series starts with the unmanned (unpiloted) Apollo 4 mission. Apollo 5 tested the lunar module docking. Apollo 8 flies around the moon. Apollo 9 and 10 test more systems in preparation for landing. Apollo 11 actually lands. Apollo 12 lands near the previous Surveyor 3 robot lander. Apollo 13 has it's excitement. Apollo 14 visits Fra Mauro. Apollo 15 introduces the rover. Apollo 16 explores a deep crater. Apollo 17 includes a geologist. The series ends with the Apollo-Soyuz mission. And, yes, there are mentions of Skylab and the Space Shuttle.

This series is available in the WAS library, at the Macomb Community College meetings. Be sure to check out our other tapes and DVDs. The WAS library also has books (imagine that) on a variety of subjects.

Stephen

Here’s another great web resource found by Guy Maxim:

Here’s a new resource I happened across. 
http://www.mel.org/SPT--BrowseResourcesNewMeL.php

It’s an eLibrary available to Michigan residents. All you have to do is give it your drivers license or library card number. Searching one of the scientific databases I was able to dig up thousands of astronomy articles within minutes.

Guy

Here’s another one I believe was published in September of last year. I use it frequently when discussing the vastness of space with young people and felt it should be presented again. This web page was submitted by Richard Gala. Astronomy is a fun science. – Editor

Hi All,

Received this web site from a friend and thought it might be of interest to some of you.

http://dingo.care-mail.com/cards/flash/5409/galaxy.swf

Dick

Member’s Astro Pics

Pillars of Creation
by Dr. Philip Martin

(Pictures of note along with background data may be submitted to the WASP editor for publication.)

Editor’s Note: Here is the new email address for Marty Kunz, Director, Public Relations:

solarmartykz@sbcglobal.net
Clouds from Top to Bottom
By Patrick L. Barry

During the summer and fall of 2006, U.S. Coast Guard planes flew over the North Pacific in search of illegal, unlicensed, and unregulated fishing boats. It was a tricky operation—in part because low clouds often block the pilots' view of anything floating on the ocean surface below.

To assist in these efforts, they got a little help from the stars.

Actually, it was a satellite—CloudSat, an experimental NASA mission to study Earth’s clouds in an entirely new way. While ordinary weather satellites see only the tops of clouds, CloudSat’s radar penetrates clouds from top to bottom, measuring their vertical structure and extent. By tapping into CloudSat data processed at the Naval Research Laboratory (NRL) in Monterey, CA, Coast Guard pilots were better able to contend with low-lying clouds that might have otherwise hindered their search for illegal fishing activity.

In the past, Coast Guard pilots would fly out over the ocean not knowing what visibility to expect. Now they can find out quickly. Data from research satellites usually takes days to weeks to process into a usable form, but NASA makes CloudSat’s data publicly available on its QuickLook website and to users such as NRL in only a matter of hours—making the data useful for practical applications.

"Before CloudSat, there was no way to measure cloud base from space worldwide," says Deborah Vane, project manager for CloudSat at NASA’s Jet Propulsion Laboratory.

CloudSat’s primary purpose is to better understand the critical role that clouds play in Earth’s climate. But knowledge about the structure of clouds is useful not only for scientific research, but also to operational users such as Coast Guard patrol aircraft and Navy and commercial ships at sea.

“Especially when it’s dark, there’s limited information about storms at sea,” says Vane. “With CloudSat, we can sort out towering thunderclouds from blankets of calmer clouds. And we have the ability to distinguish between light rain and rain that is falling from severe storms.” CloudSat’s radar is much more sensitive to cloud structure than are radar systems operating at airports, and from its vantage point in space, Cloudsat builds up a view of almost the entire planet, not just one local area.

“That gives you weather information that you don’t have in any other way.” There is an archive of all data collected since the start of the mission in May 2006 on the CloudSat QuickLook website at cloudsat.atmos.colostate.edu. And to introduce kids to the fun of observing the clouds, go to spaceplace.nasa.gov/en/kids/cloudsat_puz.shtml.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.
A CloudSat ground track appears as a red line overlaid upon a GMS-6 (a Japanese weather satellite) infrared image. CloudSat is crossing the north-central Pacific Ocean on a descending orbit (from upper-right to lower-left) near a storm front. The radar data corresponding to this ground track (beginning in the center panel and continuing into the lower panel) shows a vertical cloud profile far more complex than the two-dimensional GMS-6 imagery would suggest. Thicker clouds and larger droplets are shown in yellow/red tones, while thinner clouds are shown in blue.
STARS AND MUSIC FILLS THE AIR WITH THE CLARKSTON COMMUNITY BAND AND WARREN ASTRONOMICAL SOCIETY CONCERT AND STAR PARTY

The Clarkston Community Band (CCB) joined by members from the Greater Windsor Concert Band, Warren Astronomical Society (WAS), and Independence Township Parks and Recreation present “Stars Over Clarkston II”. This FREE event will take place on Saturday, May 19, 2007, at 7:00 pm in Clintonwood Park, 6000 Clarkston Road, Clarkston, MI 48348.

The evening starts off with a dazzling musical concert featuring space music from the movies including “Star Wars”, “Lost in Space” and “Star Trek”. Treasures from the band’s extensive music library will bring you the big band sound with “Star Dust” and “Fly Me to the Moon.” Recently the Chandra X-ray Observatory has detected the deepest musical note ever sounded in the universe - B flat, 57 octaves below middle C - emitted by a black hole. Join the CCB tuba and low brass sections as they attempt to repeat this historic event.

After the concert the WAS will have short astronomy presentations with a Q&A period including how to use your telescope! WAS members will bring their telescopes and Southern Michigan’s largest portable 22” Dobsonian telescope for you to view through. So pack up a picnic dinner, blankets/lawn chairs, your telescope (optional) and shoot on over for the greatest musical star party ever!

Now in its 11th season, the Clarkston Community Band is one of the areas fastest growing and most respected wind bands. Its 52 volunteer musicians dedicate their time and talents to performing free concerts for the greater Clarkston area and presenting various educational and family entertaining themed concerts. The band was selected to perform internationally in 2007 for the “Spectacle of Winds” with the Greater Windsor Concert Band. CCB programs are made possible in part by Independence Township Parks and Recreation and the Clarkston Community Schools.

For more information, contact Independence Township Parks and Recreation at 248.625.8223, email clarkstonband@hotmail.com or visit www.clarkstonband.org.
Clarkston Community Band
Vince Chrisman, Music Director & Conductor

STARS OVER CLARKSTON II

A Concert of Space Music and Star Party

With The
WARREN ASTRONOMICAL SOCIETY
Norman Dillard, President

Saturday  May 19, 2007  7:00 PM

FREE ADMISSION

Family & Friends Fun
Bring a picnic, Lawn Chairs, Blankets, and your Telescope

Clintonwood Park
6000 Clarkston Road
Clarkston, MI 48348

Music of stars & space  Multimedia presentations  Astronomy talks
Telescope viewing – solar, planetary and deep space
Learn about telescopes or bring your telescope and learn how to use it

Independence Township Parks and Recreation
Michael Turk, Director

For more information call 248.625.8223 or email clarkstonband@hotmail.com
www.clarkstonband.org