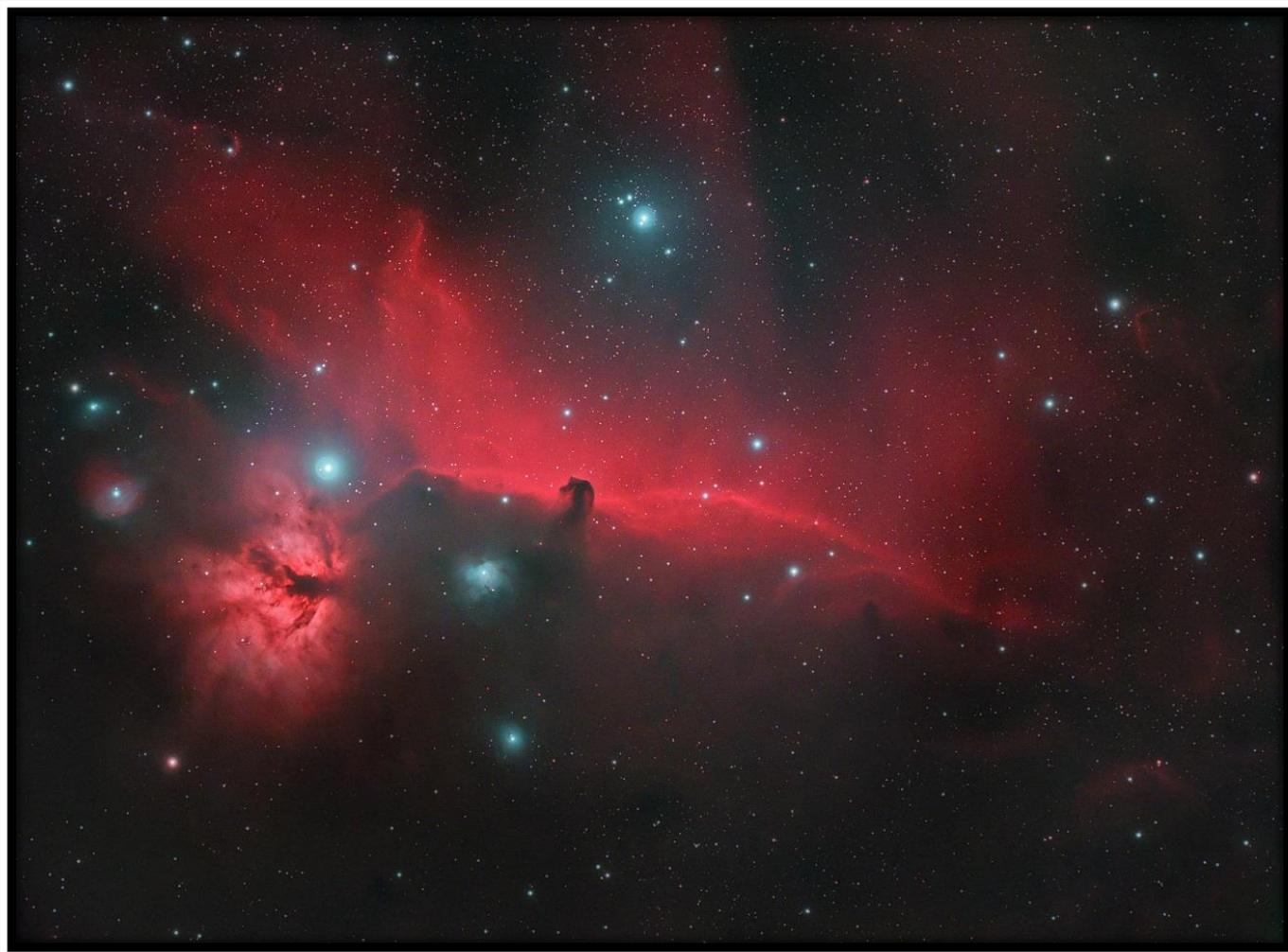


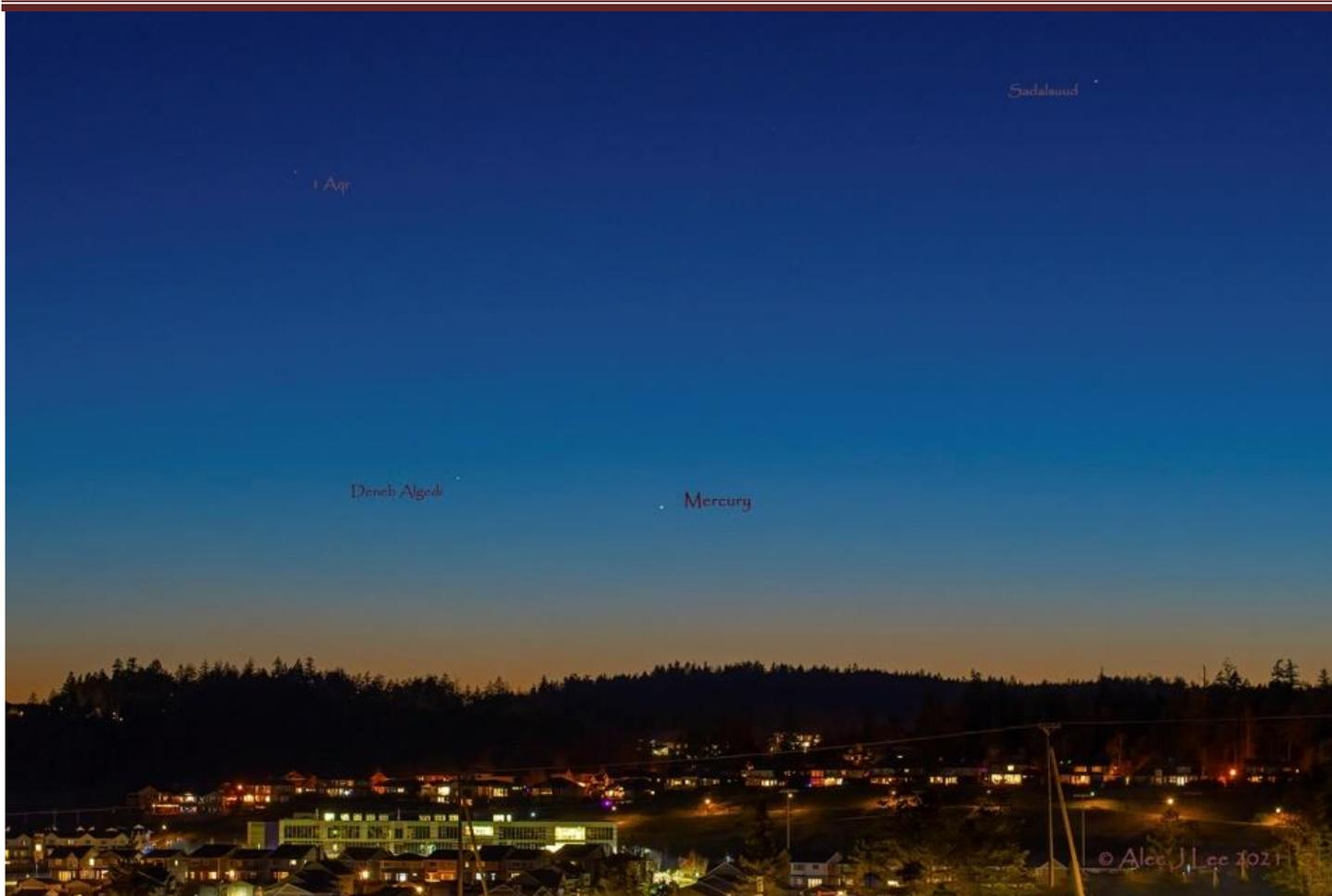
SKYNEWS



Horsehead Nebula (B33, IC434), imaged Jan 16 and 18, 2021, by Dan Posey

Our Annual General Meeting during the COVID19 Pandemic

Holding the 2021 AGM provides a new challenge for the Victoria Centre of RASC. With the pandemic in full swing, it is not possible to meet in person, but an AGM must be held in accordance with the regulations. This year, our AGM will be held via Zoom and will take place on Monday, February 22, 2021 at 7:30 p.m. We hope as many members as possible will be able to attend. Our Centre Bylaws define a quorum as 25 members, so if you are not able to attend please consider sending your proxy to another member who is able to attend.



Mercury, between Capricorn and Aquarius, Jan 22, 2021, by Alec Lee

In addition to the presentation of the annual report of the centre and the annual financial summary, awards will be presented. It is a great time to reflect on what has happened during the course of a year, especially a year that provided no opportunities for in-person public outreach events. The year 2020 will stand as a year without an Astronomy Day, without visits to the Dominion Astrophysical Observatory, and with one of the last opportunities to gather in person being our previous AGM in February 2020. Our membership did fall from the highs of previous years but we are having new members join as people have more time to spend on hobbies while staying at home. We are finding alternatives to meeting in person to share our interest in astronomy.

An important item of business at the AGM is the election of a new Council for the Victoria Centre. Currently, we have nominees for all positions but the First Vice President and a second National Representative. Thank you to the Centre members who have put their names forward to serve on the next council. The nominees are:

Directors

President: Randy Enkin

First Vice President: *to be determined*

Second Vice President: Marjie Welchframe

Secretary: Barbara Lane

Treasurer: Deb Crawford

Past President: Reg Dunkley

Officers (Portfolio if applicable)

Jim Nemeck: Camosun College Liaison

Matt Watson: Computer Applications

James Di Francesco: DAO Liaison

Lauri Roche: FDAO Liaison

Alex Schmid: Librarian & University of Victoria Liaison

Dave Robinson: Progressive Lighting Coordinator

Chris Purse: Membership Coordinator

Bill Weir: National Representative & Pearson College Liaison

Bruce Lane: SkyNews Editor

Jim Stilburn: Observing Chair

Malcolm Scrimger: Outreach Coordinator

Sid Sidhu: Schools Program & Telescopes

Dan Posey: Technical Committee Chair

Joe Carr: Webmaster

Members at Large: Chris Gainor, Jim Hesser, David Lee, and John McDonald

Chris Purse



Editorial Remarks



RASC Victoria Centre continues to be an online entity as we move warily into the second year of the Pandemic. We've been fortunate to live here on Vancouver Island, where despite less than altruistic people still taking vacations or hosting parties, we've so far managed to avoid the worst of it. We've also been very fortunate to have the use of Zoom, YouTube, social media, and our own website to help keep the Centre's members connected and informed during these long months. Our counterparts in 1918 were certainly not given such opportunities as us. We've even seen the creation of Special Interest Groups, designed to go into greater depth on the subjects of electronically assisted astronomy, astrophotography, telescope making, and for those just getting started as amateur astronomers. Unlike last year's annual general meeting and all those preceding it, there will be much less pomp, but perhaps more

circumstance than desired. Monday night's dinner planning is up to you this time around, but at least you won't have to drive home afterwards.

There have been some moments of clear sky since the New Year, but for the most part the nights have been cloudy in January and continuing to be less than ideal throughout February. Unless you're keyed in on the Doppler radar sites for breaks in the weather, for amateur astronomers wanting to practice their hobby, it's often been a case of poking your head out the window to see if there are some clear skies to reward your curiosity. The gardening season was just beginning in earnest for Greater Victoria when we were blindsided by more snow than we're used to this time of year, but still nothing close to the winter others are having elsewhere.

In this issue of *SkyNews*, we'll have more recaps from our Centre's activities, an article about observing during the pandemic by Miles Paul, as well as all the astrophotography and articles you've come to expect from the *Victoria Centre SkyNews*.

Bruce Lane: SkyNews Editor

President's Message for February

Much has happened since my previous monthly message. South of the border there was an attempted insurrection, an impeachment, and an inauguration of a more temperate leader. North of the border, "*NOT YET IMAGINED*", the much anticipated study of Hubble Space Telescope Operations authored by Victoria Centre RASCAL Chris Gainor was released (available for free download from NASA at: <https://www.nasa.gov/connect/ebooks/not-yet-imagined.html>). The Victoria Centre also acquired a beautiful 130mm Takahashi refractor to pair with the OGS 12.5 inch reflector at the Victoria Centre Observatory. Meanwhile the Covid Vaccine inoculation program is gaining momentum. So one can sense a tentative positive vibe and some are speaking of a "*light at the end of the tunnel*." Let us hope that the light is a very faint star "*light months*" away and not some bright star "*light years*" distant.



The compelling political drama and Dr. Bonnie's updates have hijacked our attention and robbed us of that non-renewable resource called "time". The impact of this time theft is apparent in my household as copies of Sky and Telescope and the Journal of RASC lie half read. And then there are the many quality astronomical presentations on You Tube that I never got around to watching. While the face to face outreach activities have ground to a halt, astronomical discoveries continue and the recording of Zoom presentations has significantly increased the amount of information available to digest.

So we are presented with a challenge. How should we ration our dwindling amount of time and how much of that should be devoted to astronomy? This, of course, is a highly individual choice. I hope the word 'joy' is at the heart of the decision and includes the joy experienced observing the night sky, the joy of learning new things, the joy of improving our understanding, the joy of unravelling mysteries, and the joy of sharing our knowledge and enthusiasm with others. Another key word is "satisfaction", which for instance can be applied to the satisfaction derived from knowing our way around the night sky, the satisfaction of acquiring skills to photograph and sketch astronomical treasures, the satisfaction of mastering a technology, and the satisfaction of understanding the theory which explains what we see or detect. And don't forget the "energy" required to make it happen and the "curiosity" to learn more. If you think of astronomy as a giant smorgasbord, the challenge is to load our plate with nourishing ingredients while trying to minimize overindulgence.

During my term as Victoria Centre President I witnessed the diversity in the appetites displayed by RASCals as they have loaded up their plates at this smorgasbord. I have been inspired by the discipline of many who systematically work on observing lists, the dedication of some to improve their astrophotography skills, and the time and energy that others devote to education and outreach. I am also very appreciative of the community of professional astronomers for sharing their knowledge and research with the Victoria Centre. It has been a joy to get to know our amazing group of RASCals

better and I am thankful to so many for their cooperation and support while I have been at the helm. It has been an honour to serve and I encourage you to attend our Zoom AGM on Monday, February 22nd to select our next President and Victoria Centre Council. Let us hope that we will be able to gather in person by this time next year.

Stay Well ... and oh yes

Usable Skies

Reg Dunkley



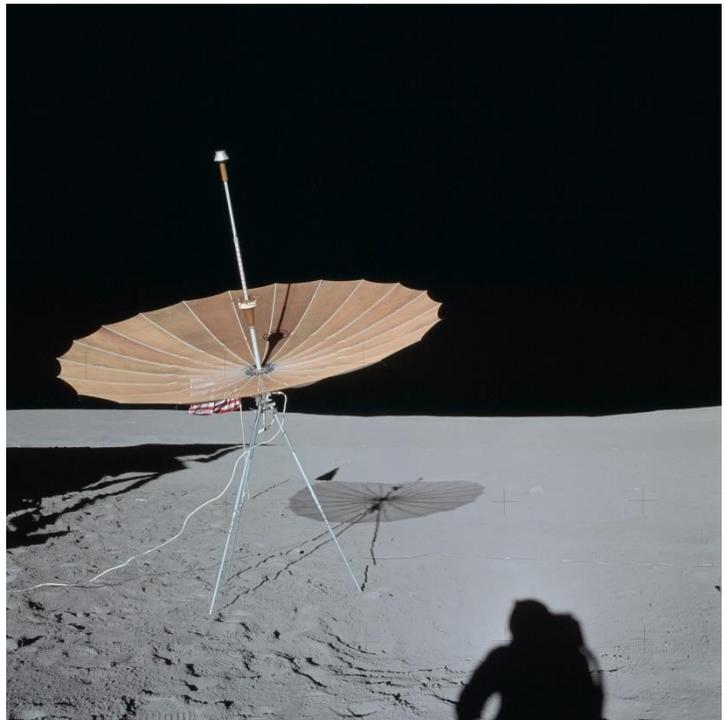
Astro Café: Continues Online



The weekly social gathering of amateur astronomers on Monday nights, known as Astro Café, continues online. As with many groups, we're trying to find ways to still function as a Centre, without meeting in person. Members are posting their astrophotography, short articles, as well as links to astronomy stories from the Web. Sadly you'll have to make your own coffee and the only cookies are those your browser picks up when you visit our website. You can access the *Virtual Astro Café* at: <https://www.victoria.rasc.ca/astronomy-cafe/>

The first Astro Café of January was another hybrid affair, with Astro Café continuing to do double duty as the RASC Victoria monthly meeting. Reg Dunkley talked about the proposal to purchase a Takahashi 130 refractor and improvements at the VCO, and let everyone know that there are still RASC calendars available. Our membership coordinator and Past President, Chris Purse, talked about the need to fill some vacant positions at the upcoming annual general meeting. Sid talked about the much redced school program, due to the pandemic. Joe Carr thanked everyone for participating in the VCO usage survey that will serve as a valuable tool for charting the future course of the VCO. The guest speaker, Dr. Matt Taylor from the Herzberg Institute of Astronomy and Astrophysics, gave a presentation titled: "*Judge Me By My Size, Do You? Tales of the littlest galaxies that could*". Afterwards, Chris Gainor talked about his Hubble book, *Not Yet Imagined*. Reg Dunkley gave a summary of the web submissions for Astro Café and goings on in the astronomy community.

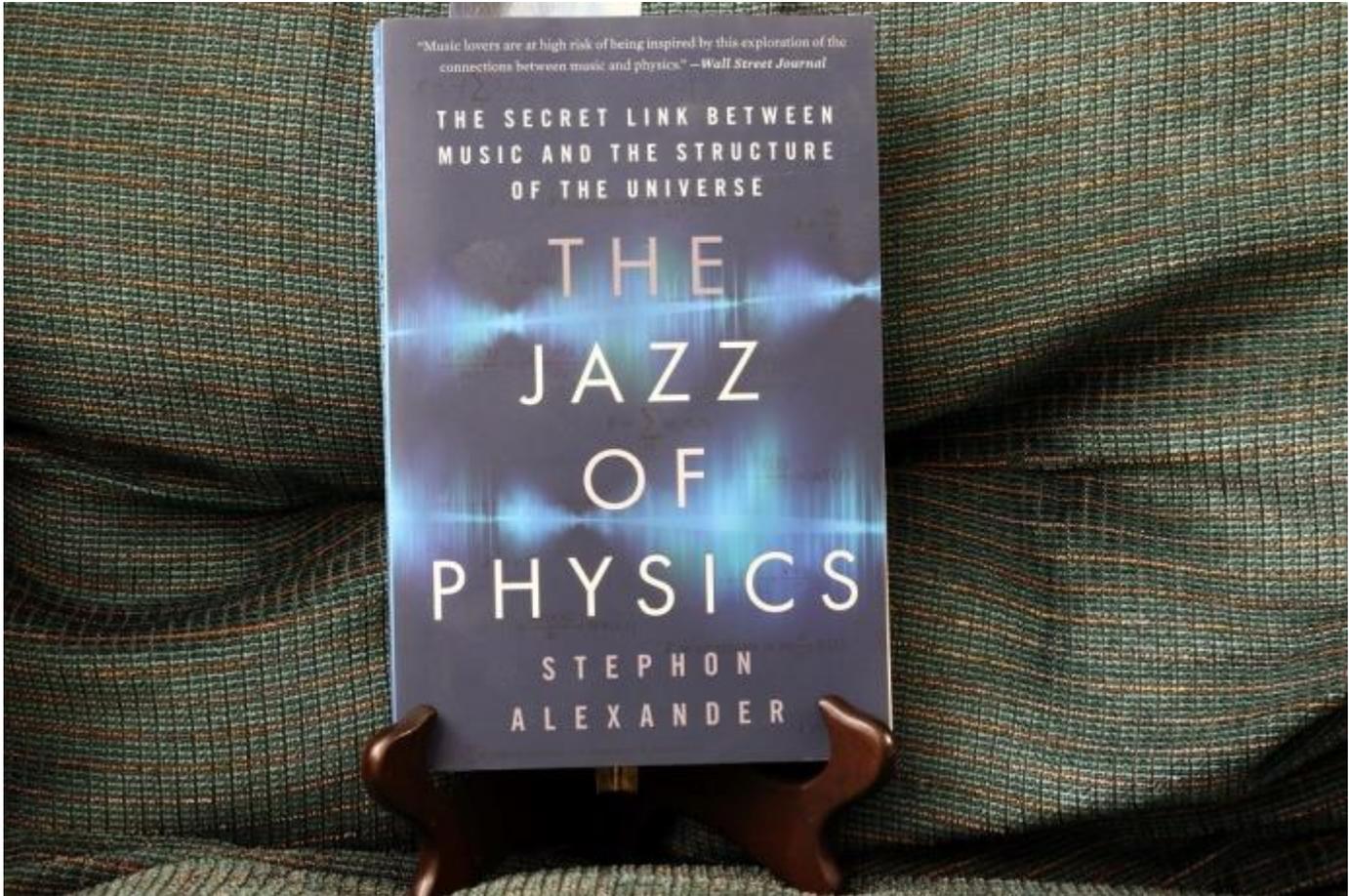
The second Astro Café of the month was hosted by Chris Purse. Laurie talked about the upcoming FDAO star party, David Lee discussed the new Special Interest Groups, Randy Enkin gave a review of the Jupiter-Saturn conjunction, John McDonald talked about the results of testing light pollution filters in downtown Victoria, and Reg gave a summary about what was happening on the Astro Café page. The third and last meeting of the month was again hosted by Chris Purse, mentioning that both Laurie and he still have calendars for sale and that the new RASC membership registration system was not yet online. John showed a physics video, Randy made a presentation of a collection of sketches and Mike Nash's pictures, and Randy also led a discussion about a telescope someone was having trouble using (without being specific) and there were a suggested solutions. Afterwards, David talked about the Special Interest Groups and the Kalamazoo Astronomy Club course being offered online from Michigan, Dave Robinson showed some astrophotography from RASC Edmonton, and Reg wrapped things up by summing up the content on the Astro Café page.



Bruce Lane

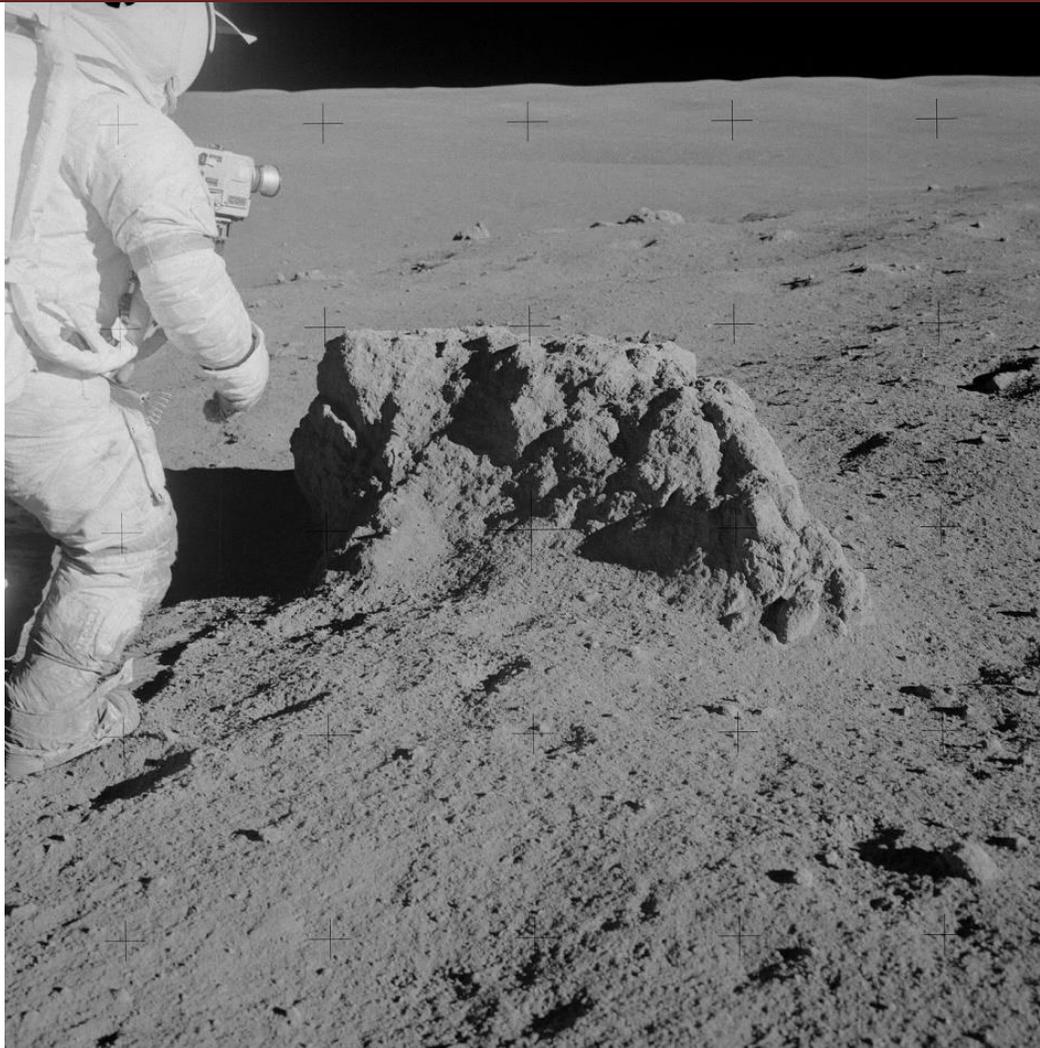
From the Library

The RASC Victoria Centre Library is housed in the Astronomy Department's faculty lounge, located on the 4th floor of the Elliott Building, at the University of Victoria. It contains over 500 titles, curated by Alex Schmid, our RASC Victoria Librarian. Our library covers many aspects of astronomy: observing, astrophotography, telescope construction, space exploration, astrophysics, and much more. Normally, the library is opened up during the social gatherings in the faculty lounge, after our monthly meetings, with coffee, juice, and cookies provided by our Centre. I've been doing book reviews of the contents of our Centre's library, but until the resumption of our monthly meetings, I'll be doing reviews of the astronomy books from my personal library, ones that can be purchased online or better yet at your local bookstore.



This month we're taking a look at *The Jazz of Physics*, by Stephon Alexander. Like many good books about science, especially those written for people outside their scientific department to read, this book's strength is in its analogies. It's as much a biography of the author's journey as a physicist and jazz musician, as it is a journey through the study of cosmology through the lens of music. *The Jazz of Physics* is thoroughly enjoyable read and it's available by order from your local bookstore.

Bruce Lane



Vicarious Observing in the Year of Covid

At the close of this strange year, in which Dorothy and I have done essentially no serious deep sky observing, I've been thinking back about my past 33 years as an amateur astronomer, recalling nights when I had particularly satisfying (memorable?) observing experiences.

PART 1: There was the night in 1991 at a remote back-country site south of Mono Lake California that I noticed that all 9 planets could be visible at essentially the same time (yes, there were still 9 planets back then) – I took a last peek at Pluto in my telescope, turned west to see Mercury, Venus, Mars, and Jupiter over the Sierra Mountains (Earth), turned east to see Saturn, and then in binoculars Uranus and Neptune, which I had practiced finding the previous night: 9 planets in 6 seconds. I sent a letter to *Sky & Telescope* about it – they thought it was probably a record. Then, there was the time at the Oregon Star Party when the seeing was so exceptionally good that some folks were stacking Barlows to split close

double stars. I was observing with my friend Ron Dawes, with his 20" F5 Dob. The image of Saturn at moderately high power and a yellow-green filter was spectacular, almost unbelievable. On another exceptional night with Ron and his scope in Eureka Valley, California, I was able to see the 2 lensed images of the Twin Quasar in UMa (Q 0957+561A,B) with averted vision for brief moments – the only time I've been able to do that in the many times I've observed it. The Quasar, magnitude 16.7, is just under 14 billion light years distant and lensed by a foreground galaxy at 4 billion ly. It is variable and was probably near its peak. Then there was the February night with Dorothy and her 15" UC Obsession in the remote backcountry of Death Valley NP, -5°C; Dorothy's SQM reading was 21.9 (you don't get much better than that).

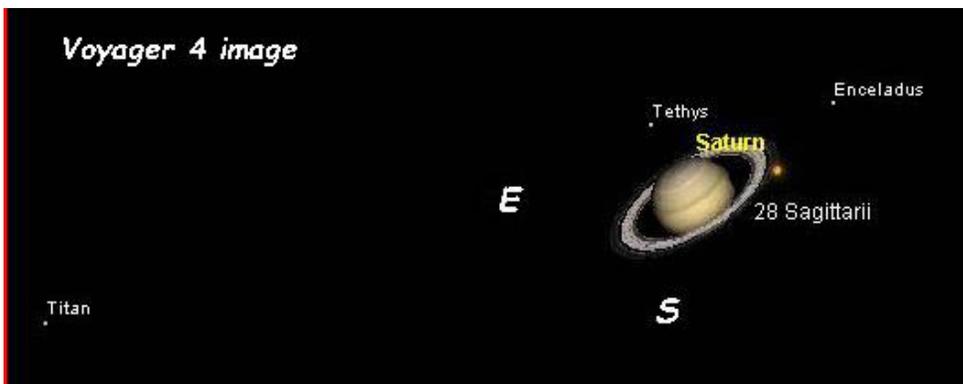
We "went to the Horse Head Nebula, with the H-Beta filter in the eyepiece. I have always been able to see the Horse Head, but usually as a very faint patch without any real structure visible. My first thought when I looked in the eyepiece that night was 'wow, what's the Milky Way doing there?' The background nebulosity stood out like I had never seen before silhouetting a "real" horse head, not just an earless darkish patch.

I was a late comer to night sky observing and only started in the fall of 1987, aged 47. By the summer of 1989 I had been learning the constellations and picking off Messier objects with 7X binoculars and an 80mm spotting scope (Celestron SS80). In early June, I headed south through Oregon, with overnight stops at Delintment Lake and Steens Mountain, and into California with nights at Castle Crags and Bodie State Historical Park, north of Mono Lake, about 8000 ft elevation. Then I continued south to Westgard Pass, in the White Mountains (East-central California near the Nevada border) for a few nights before continuing up White Mtn Road to Grandview Campground at 8000 ft elevation, where I remained for the rest of June. This was my first trip with my new C8 (Celestron 8" SC), never dreaming that I would ever have a 20" Dob with an F3.3 quartz mirror. While it revealed a host of new (to me) deep sky objects, I continued to "pick-off" Messiers with my SS80 because I wanted to see them all first with that small scope (I also used it years later for my Messier marathon). During this time, I observed many new objects for the first time every night, since almost everything was new to me back then (NGC galaxies, globular clusters, light and dark nebulae, Saturn, and features on the moon, etc). I spent my days hiking the back country around the area.

On the 29th of June getting close to new moon, I drove up the road to Sierra View Point (about 9000 ft elevation and a better southern horizon) with my SS80 hoping to see Omega Centauri. Success! From my notes: "*Omega Cen low on horizon – tried higher eyepieces but couldn't resolve stars - Centaurus A N5128 vague - M83 very good*". Then it was back down the road to Grandview where later that night I observed the last of 110 Messier Objects, M76. My notes: "*M76, 2:50 am. small diffuse glow at 22 X" (remember, I'm only using an 80mm refractor) - "Messier Observations complete, what a night! – listening to Queen Ida at the Great American Music Hall from New Orleans on KNPR Las Vegas"*".

Well, OK, those were particularly satisfying observations to dream about in these dystopian times of CoVid 19, but the rare conjunction of Jupiter and Saturn on the Winter Equinox put me to thinking about 3 even more memorable "events": an occultation of 28 Sgr by Saturn, our first total eclipse of the Sun, and the Leonid storm of 2001.

PART 2: A total solar eclipse, a meteor storm, an occultation (not in chronological order):



02 July 1989 11:00 PM PDT East left, South down

June 2001: Dorothy's and my first total solar eclipse and the first total solar eclipse of the century. After 4 nights in Zambia's South Luangwa NP at Kafunta Lodge, we joined a group of 8, canoeing below Victoria Falls on the Zambezi River for 3 days. It was the day before our 25th wedding anniversary. After leaving the canoes at a lodge where we had pulled in, we walked a short distance to an opening in the bush, not far from the river, and met another group who were all experienced amateurs. Well, if you've seen a total solar eclipse, you know what it was like. On the drive out afterward, we had to wait for more than 100 elephants crossing the road in single file. We also stopped in a village to share the post-eclipse excitement of school kids, who with great enthusiasm explained how 'the Moon passed in front of the Sun'.

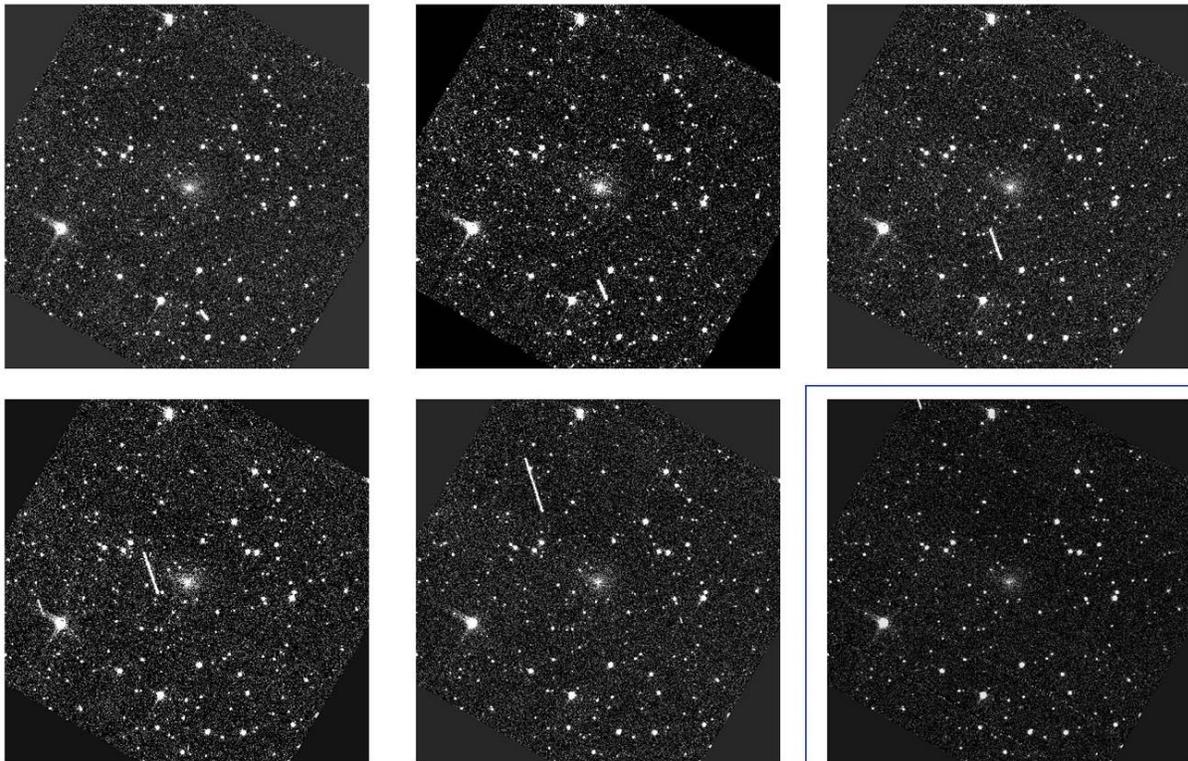
The second "event" was the Leonid meteor storm that same year (2001). I was by myself in Eureka Valley, just outside the NW end of Death Valley NP at about 5000ft elevation. Surrounded by mountains with no artificial lights visible, it was very dark (and cold). With meteors in every direction, I just stood and looked at the sky that night – my 20" Dob got a rest. During the peak, a few hours after midnight, I estimated there were about 3000 meteors per hour – it was impossible to count them; sometimes there was a period of a few seconds without any, then 2 or 3 would appear at once. I might count that meteor storm as the most amazing and exciting thing I have ever seen.

Back to the end of June-early July, 1989 for the third outstanding night – the occultation of 28 Sgr, a 5th magnitude star, by Saturn on 02 July 1989 (at the time I didn't realize how rare it is for Saturn to occult such a bright star). Having spent most of June at Grandview in the White Mountains, I headed north on the 30th, back to the ridge above Body State Park where I had spent a night on the way south earlier in the month. I set up the C8 and observed more deep sky objects the first night there. The next day it got very windy, so the seeing was not very good, but it was stunningly clear and dark - the Moon was only 0.1% illuminated. Though 28 Sgr appeared west of Saturn, I saw it approach from the left side since the field is mirror reverse in a SC scope. I did not want to be distracted from observing this event, so I did not try to record the times of the events. I was fairly new to observing and just wanted to watch it happen. The total time of the occultation was about 3 hours. My notes: "*windy, worst of the trip, scope shaking; still, saw 28 Sgr fade and almost disappear behind the A ring, briefly reappear bright in the Enke Gap, disappear again behind the B ring to reappear in the Cassini Division*". The exciting part was when the C ring, which was not visible in the C8, was passing in front of 28 Sgr. The star flicked on and off repeatedly. It was very exciting - I didn't expect that. While the star was behind the main globe of Saturn, I returned to deep sky observing.

I stayed up to see 28 Sgr emerge from behind the globe but the conditions were difficult as the wind had picked up. I saw it flick on and off a few times, and as it was behind the C Ring and passed the Cassini division and Enke Gap. By then it was late, I was tired - it was time to head home after a spectacular night and a great month-long road trip.

Note: Folks in Europe did not see this occultation but had an even rarer event – the occultation 28 Sgr by Titan later that night (03 July) as Titan was east of Saturn. Rarer, but surely not as exciting as the occultation by Saturn.

Miles Paul



Hill and Dale (Observing on the Island)

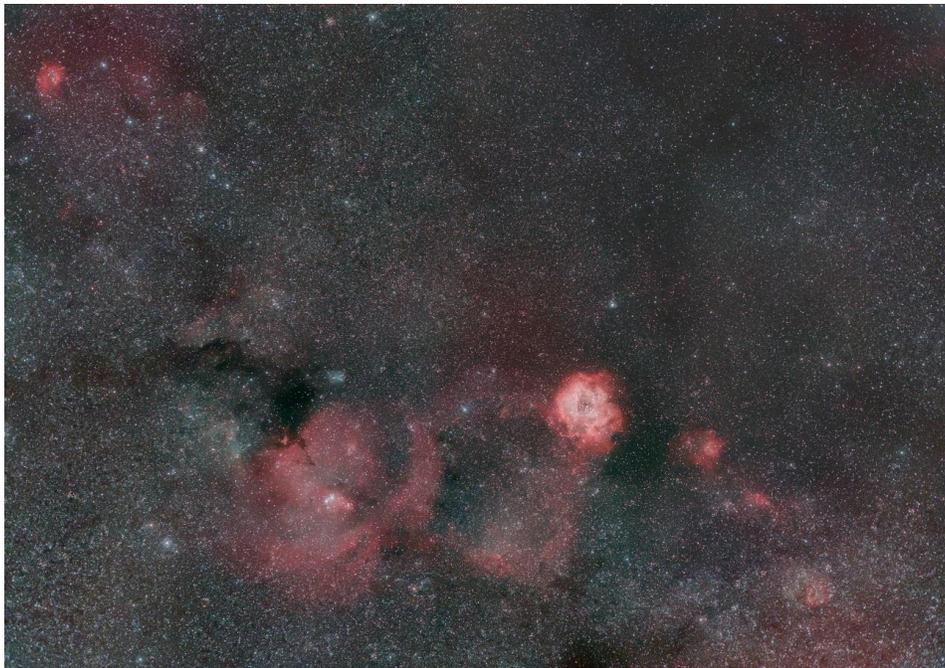
While things in January were quiet at the Victoria Centre Observatory, due to an excess of bad weather, RASCals took advantage of the occasional break in the clouds to do some individual observing. Dan Posey had a few nights of doing deep space astrophotography from his downtown balcony, including the Rosette Nebula (*seen bottom of page*). Dave Robinson and Brian Barber set up their telescopes at Cattle Point on January 16th, to get some views of popular Messier list targets. On the same evening, Bill Weir was out at the Pearson College observatory to get a closer look at the Red Rectangle Nebula (HD 44179) in Monoceros. Chris Spratt collaborated with some other astronomers, using the Canadian NEOSat orbiting telescope (C53) to image the Periodic Comet 141P Machholz (*see previous page*). Other Rascals, like David Lee and Alec Lee, were taking advantage of the clear skies to observe and image Mercury, the day before its greatest separation from the Sun on January 23rd.

The main news at the VCO was the Council acting on the results of Joe Carr's survey of observatory usage by our members. The RASC Victoria Council voted in favour of acquiring a Takahashi TOA 130 S refractor, to be paired with the current 12.5" Ritchey-Chretien telescope. The Takahashi 130 is a highly prized piece of optical glass and we were fortunate to acquire it from Mike Kremptotic, a friend of RASC Victoria, for a good price. While he was delivering the refractor telescope, Mike also generously took the time to inspect, as well as make some adjustments and suggestions to improve the performance of our 20" Obsession Dobsonian reflector. Having just finished mounting the new Ritchey-Chretien, Matt and Dan, of the Tech Committee, were once again pressed into service, this time setting up the new refractor at our observatory.



A reminder that although the VCO belongs to and is for the use of the members of the RASC Victoria Centre, with both weekly scheduled and unscheduled sessions run by our MiCs (Members in Charge). The VCO is located on National Research Council property. This means that all visitors to our observatory must be on our observer list and registered with the NRC. To get on the list, just contact Chris Purse (Membership Coordinator) membership@rasc.victoria.ca and we'll see you up there on the Hill some night soon.

Bruce Lane





Frank Ogonoski (1950-2020)

Frank Ogonoski passed away in the remote community of Burstall, Saskatchewan at the end of last year, at the age of 70. He was a fixture of the astronomy community on Vancouver Island, as both a key founder of the Cowichan Valley Starfinders and the driving force behind the establishment of their annual Island Star Party. His home observatory was the hub of the amateur astronomy he founded. He will also be remembered as a member of the RASC Victoria Centre, for his work in public outreach on the Island, and for the assistance he gave to the astronomy department of Malaspina College (now known as the Vancouver Island University).

In Closing

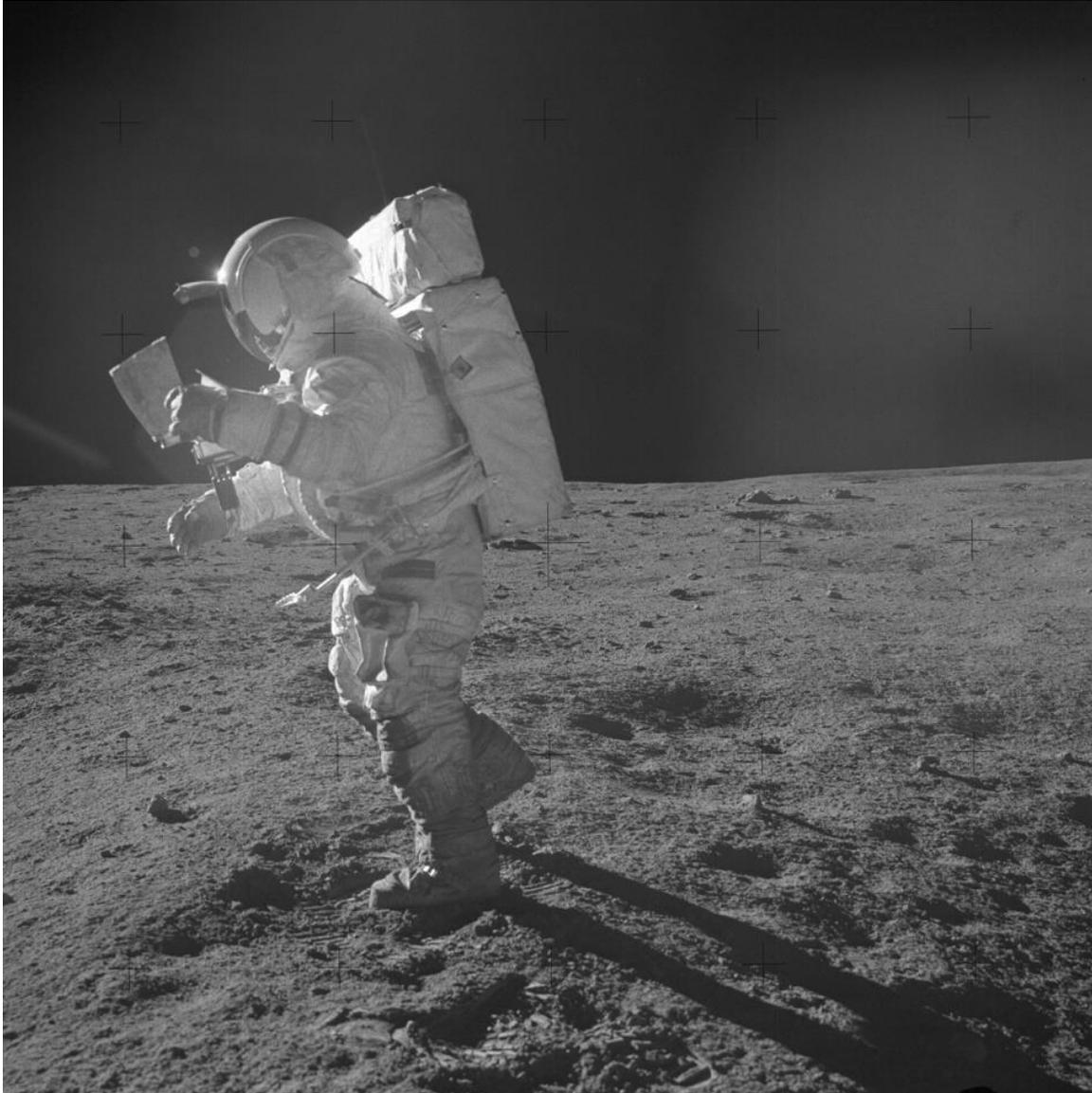
This month marks the 50th anniversary of the Apollo 14 landing on the Moon, in a much less problematic mission than its predecessor. That the first sport on the Moon was a golf tee-off by Alan Shepard shouldn't be a surprise, given the near impossibility of finding any US Air Force base without its own golf course. Just the fact that he was able to hit the ball at all, while wearing a cumbersome lunar EVA suit, is a sports miracle in and of itself. Along with some poses by the flag for the media, a lot of science was accomplished on this mission, in addition to the harvesting of 42.8kg of Moon rocks, for geologists on Earth to later study.



The surface of the Moon, surrounding the LEM (Lunar Excursion Module) resembled a science fair that got a bit out of hand. The ALSEP (Apollo Lunar Surface Experiments Package) consisted of a 25kg box of experiments that were set up around a control hub, to detect and transmit their findings to Earth. The control hub used a generator that powered the experiments electronics with a plutonium-238. The instruments in the ALSEP consisted of: both a passive and active seismometer, a charged particle lunar environment experiment (to measure protons and electrons from the Sun landing on the lunar surface), a cold cathode ion gauge (to measure atmospheric changes), a lunar dust detector, and a suprathemal ion detector. In addition to the standard ALSEP there was a soil mechanics investigation, a lunar portable magnetometer (to study the Moon's magnetic field), and a solar wind spectrometer experiment. The Apollo 14 ALSEP station continued to periodically send data, long after the astronauts who set them up returned to Earth and even long after they both retired from NASA. The last transmission from the lunar experiments, set up by Shepard and Mitchell, were received on August 4th, 1977. Monitoring of all of the Apollo ALSEP stations was discontinued on September 30th, 1977. By this time, the power packs that sustained the ALSEP stations were having difficulties keeping both the transmitters and experiments running at the same time. The biggest reason for abandoning the ALSEPs was that NASA requisitioned the control room that monitored them for a mission to try to reactivate the ailing Skylab.

As we prepare for the disorientation of having our Annual General Meeting online for the first time, it's time to say thank you to our outgoing president: Reg Dunkley. His two year term as the head of the RASC Victoria Centre included some serious challenges. There was the debacle with the 16" Ritchey-Chretien telescope, which has only recently been replaced. Then there was a pandemic to start his second year as president, which posed a lot of questions about how to keep functioning as a group, when everyone was physically separated. The RASC Victoria Annual General Meeting is a semi-formal dinner and meeting, so remember to wear your best pajamas on Zoom.

Bruce Lane: SkyNews Editor



Photography Credits

Cover: Horsehead Nebula (B33, IC434) 6 hours, Jan 16 and 18, 2021, by Dan Posey. 5h45m of 3 minute frames (115x3m) from downtown balcony, using an Askar 108mm, Canon Ra at iso 800 on the first night and 1600 the second night, and a Hutech NB1 filter.

Page 2: Mercury, between Capricorn and Aquarius, Jan 22, 2021, by Alec Lee

Page 3: Apollo 14, Stu Roosa (left), Al Shepard (center), and Ed Mitchell (right) in the isolation van. Feb 9, 1971. Scan by Ed

Hengeveld. Courtesy of NASA.

Page 4: Crop of Bruce Lane (SkyNews Editor) at 2013 RASC Al Star Party in Metchosin, by Chris Gainor

Page 4: Crop of Reg Dunkley (RASC Victoria President) at 2018 AGM, by Joe Carr

Page 5: Apollo 14, Up-Sun from Al's 12 o'clock pan taken near the LM at the start of EVA-1. There is relatively little glare, perhaps because part of the LM shadow may be falling on Al's camera lens. Without the Sun glare, we can see some detail on the Cone-Crater ridge. Flag, S-Band antenna, ladder, the LRRR in the west footpad. Feb 1971. Processed by Kipp Teague. Courtesy of NASA.

Page 6: Photograph and Design of Astro Cafe Mug, by Joe Carr

Page 6: Apollo 14, Looking west-southwest, the last picture in this pan shows the S-Band antenna and the flag directly behind it. Towards the right side of the picture, the glare of the Sun at its zero phase point washes out many of the details of the surface. The flag is pointing on an azimuth of about 120. Feb 1971. Processed by Kipp Teague. Courtesy of NASA.

Page 7: Posed Book, "The Jazz of Physics", taken in Editor's home on Feb 21, 2020, by Bruce Lane

Page 8: Apollo 14, Close-up of the boulder at Station B2. In the Apollo 14 Preliminary Science Report, this boulder is referred to as Big Rock. The upper surface is unusually flat and may represent a fracture surface. The rock is 0.6 meters high and about 1.5 meters long. We can see Al's camera with CDR (Commander) written on the side, the tongs under his hoses. Note the dirt on his boots and knees. The picture is taken toward the north. They have come up a small rise and, out in the distance beyond the boulder, we can see a large crater.

Ulli Lotzmann calls attention to a detail, which shows that the strap on Al's right boot has come undone. During the technical debrief, he was asked about this picture and replied "*I didn't notice it until I saw the picture myself*", to which Ed added "*I noticed it something during the EVA... I guess I didn't mention it and he didn't have any trouble with it.*" Readers should note that the EVA boot is an overshoe and is not an integral part of the pressure suit. Feb 1971. Processed by Kipp Teague. Courtesy of NASA.

Page 10: Periodic Comet 141P Machholz and an unknown object on UT 2021 Jan. 23 (08:27 - 08:33). Exposure durations are 36 seconds. The FOV is 51x51 minutes of arc, orientation north-up/east-left. At the time of observation the object was 76.8 degrees from the sun. Canadian NEOSSat orbiting telescope (C53). Courtesy of D. D. Balam (DAO), C. E. Spratt (ret), D. W. E. Green (CBAT), J. Psootka (CSA) & Canadian Space Agency.

Page 11: Mike Kremptotic with Obsession Dob, Jan 18, 2021, by Reg Dunkley

Page 11: Rosette Nebula (Caldwell 49), Jan 5, 2021, by Dan Posey. This is another one from the downtown balcony - 1h4m (128x30s) of exposures with my Sigma 105mm at f1.4 and my Canon Ra at iso 800 on my iOptron Skyguider Pro (loosely pointed North). The images were calibrated with bias/flat frames, and stacked/processed in Pixinsight.

Page 12: Certificate of Appreciation Presented to Frank Ogonoski - for his outstanding career achievements and support for the RASC Star Party and Society activities with Scott Mair (left) presenting, 2003 RASC Victoria Centre AGM, photographer uncredited

Page 12: "Clyde" Light Brahma chicken, not interested in leaving the coop for the snow, Feb 13, 2021, by Bruce Lane

Page 13: Apollo 14, Al's Station B1 pan, showing Ed studying the traverse map. This is one of the better known pictures taken during Apollo. Ed has turned, but is still trying to puzzle out where they are. This photograph is symbolic of the traverse as a whole. We can see Ed's camera handle and his tongs tethered on his left hip. Feb 1971. Processed by Kipp Teague. Courtesy of NASA.

Page 15: Apollo 14, The Apollo 14 Command Module approaches splashdown. February 9 1971. Scan by Kipp Teague. Courtesy of NASA.

Call for Article and Photo Submissions for the March Issue

SkyNews is looking for submissions of astronomy photos and articles for the March issue of our Victoria Centre's magazine. Send your submissions to editor@victoria.rasc.ca

RASC Victoria Centre Council 2021

Director Positions	Name	Email
Past President	Chris Purse	pastpres@victoria.rasc.ca
President	Reg Dunkley	president@victoria.rasc.ca
1 st Vice President	Randy Enkin	vp@victoria.rasc.ca
2 nd Vice President	Marjie Welchframe	vp2@victoria.rasc.ca
Treasurer	Deborah Crawford	treasurer@victoria.rasc.ca
Secretary	Barbara Lane	secretary@victoria.rasc.ca
Officer Positions		
Librarian and UVic Liaison	Alex Schmid	librarian@victoria.rasc.ca
Technical Comm Chair/Sys Admin	Matt Watson	admin@victoria.rasc.ca
Skynews Editor	Bruce Lane	editor@victoria.rasc.ca
Public Outreach	Mandy Lee	outreach@victoria.rasc.ca
School Outreach	Laurie Roche / Sid Sidhu	schools@victoria.rasc.ca
Telescopes	Sid Sidhu	telescopes@victoria.rasc.ca
National Representative	Nelson Walker	nationalrep@victoria.rasc.ca
Light Pollution Abatement	Dave Robinson	lighting@victoria.rasc.ca
Membership Coordinator	Chris Purse	membership@victoria.rasc.ca
Observing Chairperson	Jim Stillburn	obschair@victoria.rasc.ca
Website Content	Joe Carr	web@victoria.rasc.ca
NRC Liaison	James di Francesco	
FDAO Liaison	Laurie Roche	
Pearson College Liaison	Bill Weir	
Members at Large	Jim Hesser	David Lee
	Dan Posey	John McDonald

