President's Message

by Jon Stewart-Taylor

Participation in astronomy club activities may not be at the top of people's list at this point. Despite the social distancing, restrictions on group size, and shelter-in-place order, the pandemic continues, with new cases even in relatively remote and low-population counties such as here in Pender. Everyone, please be safe, especially as many of us are "graying" into the critical risk demographic.

Please see Page 2 for the calendar.

That said, there is still astronomy to be done if we want to. Social media are providing lots of astronomy-related videos, activities, reading material, and even citizen-science accessible through the Internet. If you live in a building with a private yard or balcony with a view of the sky, you can get a little observing in. And if you're in the mood for a lot of observing, the Governor's order specifically allows outdoor recreation so long as group's size and social distancing rules are followed you are good to go. If you're an imager (or trying to be), that tends to be a pretty solitary activity anyway. You're welcome to observe or image at Starfields basically any night. Just send me an e-mail at stewarttaylori@gmail.com a couple hours before you go.

The executive board held a virtual meeting using Zoom, in part to try out the platform for an anticipated virtual Monthly Meeting, and in part to try to keep moving on some of the outstanding club issues. I expect Bill Cooper will publish the meeting minutes, but here are some highlights:

Until the pandemic is done, Cape Fear Astro will hold virtual Monthly and business meetings using Zoom, on the regularly scheduled date at the regularly scheduled times.

When Carolina Beach State Park reopens, and if we feel it is safe to do so, we can restart public observing, but only while exercising all due precautions.

As mentioned above, all members-only observing dates are still valid. Use proper social distancing. Groups larger than 10 are unlikely with us, so I'm not worried about that part.

Given that only 1/3 of the club expressed interest in a dark site, the board believes that there will be little enthusiasm and no support for a club building on site at Starfields. With great regret, we're going to let the subject drop. Cape Fear Astro members are still welcome as invited quests, but the observing field will remain unimproved.

A potpourri of topics were touched on: the Library Telescope program, the club calendar, the changes to the monthly meeting format, the Google phone number, the shortage of storage for the club web site, the possibility of a club image archive, possible membership in the Night Sky Network, and the New Astronomer's package. Many of these were put back on the parking lot. For some of these items, one or more board members will try to make progress between now and June. See Bill's minutes for details.

As mentioned, for the foreseeable future the Monthly meeting and Business meeting will be held via Zoom, on the date and at the time listed on the club calendar (and in the newsletter calendar). Terry has assured us that Zoom's security teething problems are largely resolved, and that as host of the virtual meetings, he'll do his best to keep us cyber-safe. If you need help with or have questions about Zoom, please contact Terry (expert) or myself (beginner) and we'll do our best.

Stay safe.

Jon

Some Thoughts

by Karl Adlon

At least one of us isn't "graying"; he's fairly gray and thinning, though not becoming thinner. <smile!>

While it is OK to not read every word, try to not skim the Newsletter too quickly since there are things going on with the Club and you could miss something important to you.

Also, I suggest putting events listed in the calendar at right that are important to you on your personal calendar. Last month I missed an observing event because I didn't do that and so didn't plan for it (do like I say, not as I do; or used to do).

I assume you are sheltering-in-place. And I assume you have a little extra time on your hands. MAYBE you could write an article for Cape Fear Skies! Don't you get tired of seeing one of two bylines: "by Jon Stewart-Taylor" or "by Karl Adlon"?

And after you write your article and send it to me, maybe you still have extra time. Another good activity would be to take a look at your telescope, eyepiece and camera optics. You might then see they could use a cleaning to get rid of dust, pollen and other offending stuff. Check in Sunday for our Zoom meeting and we will talk about this subject.

Lastly, this is NOT the "new normal"! This is ABNORMAL!



Saw a flying saucer today. It appeared right after the flying cup that my wife threw at me.

Due to the COVID-19 virus pandemic, we are under "shelter-in-place" orders.

No CFAstro meetings <u>at UNCW</u> or <u>public</u> star parties are expected at this time. Watch your email and the website for updates as conditions warrant.

May 2020

- 03 * May Meeting! * <u>This will be a virtual</u> <u>meeting using Zoom</u>. Check your email for more information!!!
- 05 Eta Aquarid meteor shower
- 07 Full Moon Flower Moon
- 14 Last Quarter Moon
- 15 Club Observing 8 PM Location TBD
- 16 Club Observing 8 PM Location TBD
- 18 Jupiter 4.7 deg. From Saturn; 121 deg. from Sun; morning; magnitudes -2.5 and 0.6; quasi-conjunction
- 22 New Moon
- 22 Club Observing 8:30 PM Starfields
- 23 Club Observing 8:30 PM Starfields
- 25 Moon 0.66 deg. from M35 cluster; 28 deg from Sun; evening
- 30 First Quarter Moon

Astro phenomena from https://www.universalworkshop.com/astronomicalcalendar-any-year/

When You Wish Upon a Comet . . .

by Karl Adlon

... you never know what you will get. Comet Atlas (C/2019 Y4) broke up into at least 4 pieces.

Now we potentially have Comet SWAN (C/2020 F8) and along with it the expected hype. Right now it is too far south for us to observe here. But next week is a good time to start looking – start about 5 AM.

Ten years ago (Wow!) I retired in June and less than a week later, instead of going to work I went looking for a comet: Comet McNaught. I looked and looked, with naked eye and 50mm binoculars, but could not see it in the dawn twilight.





I had also set up my tripod and camera, pointed where I thought the comet was and later stacked the images to reveal the faint comet. Pushing the color intensity helps show the comet, especially the tail.

So, I'm suggesting, if you have the equipment and are going to look for Comet SWAN, even if you can't see it, take some images in that direction.

Astronomical Ramblings

by Karl Adlon

Let's ramble to Sherman Park, Dixon, Iowa, home of the Quad Cities Astronomical Society's Jens-Wendt Observatory (see photo at right).

It houses a 20" f5 Newtonian on a fork mount with a 15" Byers drive in Right Ascension. There is no Declination drive.





The Byers drive replaced the original drive and it makes for an interesting story. The original drive was made by Augie Wendt, an engineer at the local TV station. He used some gearing, probably from farm equipment, and wound a motor to run at the speed needed.



However, after years of use and being subjected to the unheated, uncooled building, it became erratic. I was concerned we would offer the public a star party and then the drive would fail.

So, Steve V. found a Byers 15" Starmaster drive and after negotiations, we bought it. And then it sat and sat because they were convinced that to adapt the new drive would require welding something.

I came up with a design that did not need welding. One-by-one, the bearing housing nuts were removed and replaced with rod couplings. Aluminum angles could then be bolted to the couplings and the worm housing mounted to the angles. A couple hours later we were done.

That night, Steve V raced to the observatory to try it out and was quite pleased.



Above, guess who with his drive mount design installed.



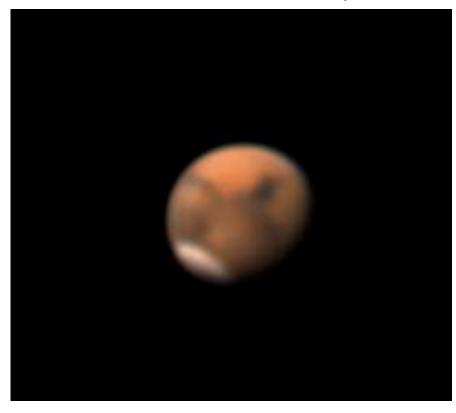
The rule was: there had to be a minimum of 2 people present when the roof was open. A few couple times I went out by myself and set up my equipment on a pad. I'd run an extension to the outlets on the outside of the observatory. I'd unlock and open the observatory door and use it as a shelter while the scope drive ran and the camera took images. Also, with the red lights on inside, the park ranger knew someone was using the observatory. When I was still working, it was a great escape – you would be outside with open skies (mostly) and birds calling. Once, a deer walked by.

I miss that sort of thing.



Mars Moment

by Karl Adlon



Each issue in 2020, this space is reserved for something about Mars in our skies.

Perhaps you have something to include?

* * * * * * * *

MID-MONTH, in the early morning skies, Mars' elevation is about 20 degrees or higher at 4:30 AM while it is still 1-1/8 AU distant from Earth.

* * * * * * * *

Right now, even though Mars is very distant, talented amateurs with good equipment can obtain nice images.

The image above is from an April 26 Cloudy Nights post by Tulloch (Andrew).

He says this about the image: "I then turned to Mars, and probably got the best result I have captured so far, there's still an issue with the rim that I can't quite fix (it's the dark line that I don't know what to do with), but I'm pretty happy with how it turned out."

Image details: Celestron Evolution 9.25" SCT @ f20.0 with 2.5x TW Powermate, ASI 224MC, 10/25% stacked in AS!3 with 3x drizzle, sharpened in Registax, final touches in Photoshop Elements, final images 50% larger than captured (Mars 2x captured).

Editor: I see he's located in Melbourne, Australia. Last month's Mars Moment image was also by an Australian. I wonder if next month's image will also be from an Aussie!

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Editor's Note: Used in this Newsletter, "Cape Fear Astronomical Society" may be abbreviated "CFAS" or "CFAstro".

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Members are welcome and encouraged to submit articles or other input for "CAPE FEAR SKIES". Submit any and all interesting items for publication to Karl Adlon, Editor (email kmja79@yahoo.com).

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