Martz/Kohl Observatories

September 2021
October 2021

Martzobservatory.org

176 Robbin Hill
Box 14
Frewsburg, NY

Board Meetings
Sept. 22th
Oct. 27th

THE PUSH

Not knowing what it would take to modify the 24-inch telescope to become a remote viewing telescope brought many of to realization this would not be an easy turn-key conversion. This promised achievement to produce a truly remote telescope for the Martz-Kohl Observatory has taken a tremendous amount of effort by many of our membership utilizing their talents.

Mechanical changes were made to ready the important conversion from the previous stepper motor system to a synchronous motor system.

Now completed, this same system is used by both the 20-inch DFM Kohl telescope and the 24-inch with its attached 16-inch Ritchey-Chretien telescope.

The 24-inch and 16-inch scopes, using a common fork mount, now have computer controlled shutters to protect the reflecting mirror surfaces, a task that had been previously been performed with covers manually uncovered and covered by an operator.

The dome shutters will receive an inductive charging system for the battery which powers the system and the motors that drive the shutters.

The Boltwood weather control determines if sky conditions are favorable to safely open the shutters or in the event of a weather change to close them autonomously.

This requires programming and integration with our MaximDL and ACP programs for full automatic operation of the telescope and imaging systems.

A NEW PAGE

Since the 15th of March 2020, out of an abundance of caution, the observatory was closed to the public due to the necessity of doing our part to prevent the spread of the COVID-19 virus. On July first, 2021, President Gary Nelson declared the doors open to welcome visitors **to tour the facility and view through several available telescopes, weather permitting. The observatory houses multiple telescopes to use for viewing celestial objects in the night sky. The Kohl telescope is a 20-inch classical Cassegrain reflecting telescope that was built by DFM Engineering in Colorado. Also available for viewing, located in the roll off roof area of the observatory, is a mounted 12-inch Schmidt Cassegrain reflector telescope. The Cassegrain reflector telescopes use a combination of a primary concave mirror and a secondary convex mirror. Guests are also welcome to bring in their own telescopes to set up on the roll off roof area of the observatory, weather permitting.**

Continued sanitizing procedures would remain in effect and sanitization of eyepieces with UV light would become of major importance. Overcrowding would not be allowed for the safety of everyone. A safe enjoyable experience is of utmost importance during a visit to the observatory.

ELECTION 2021

Oct. 13th Wednesday at 7:00 PM at the observatory we will hold our annual election to vote on the budget and four board members. Light refreshments will be served. Please attend this very important member meeting. Please bring your mask.

SITE OF THE MONTH

"Could There be 100 Billion Potentially Habitable Planets in the Galaxy?
https://www.universetoday.com/100767/could-there-be-100-billion-potentially-habitable-planets-in-the-galaxy/#more-100767

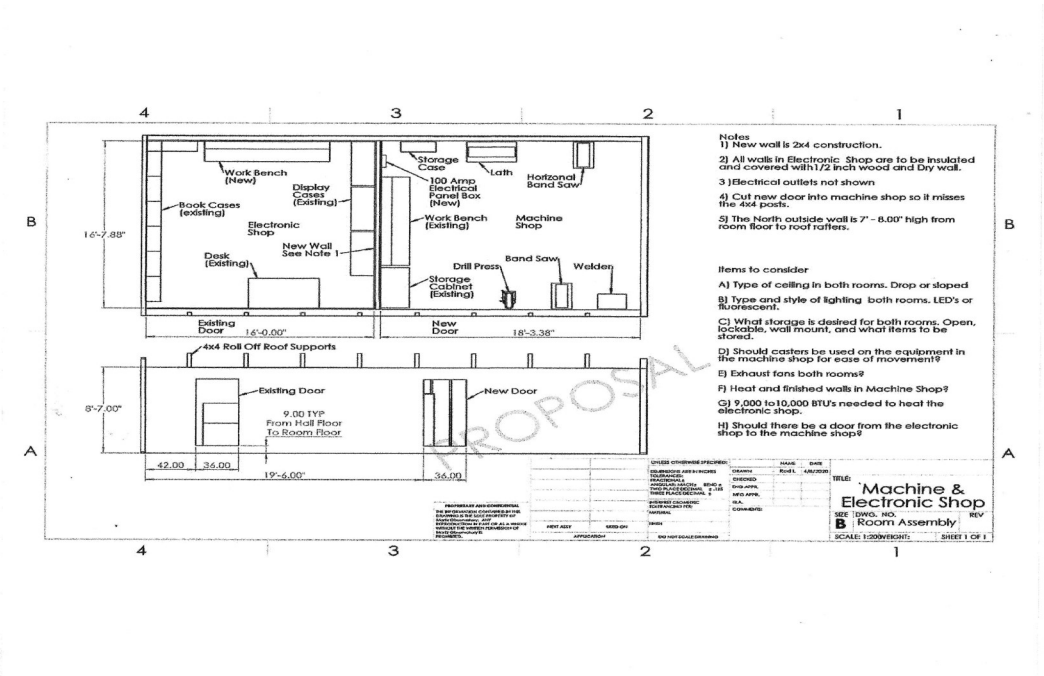
PROGRESS IN THE MAKING

Twenty years and years before that produced an almost insurmountable accumulation of clutter donated by those whose interest was to help the observatory by gifting an over abundance of obsolete we-might-be-able-use-it-someday items until our new store room became a present day Fibber McGee's closet, for those old enough to remember that comedy radio show.

During the summer of 2021, the time had come to sift through the numerous desks, display cases, kitchen cabinets, hoards of nuts and bolts, nests of an accumulation of wires, circuit boards, out dated computer hardware, printers, displays, training aids, and numerous boxes of items, one time thought to become useful someday. It had become, simply put, a hoarders heaven.

There wasn't anyone who would deny that a large task lay ahead to bring order out of a nearly impenetrable accumulation, that required extensive sorting. Observatory member John Anderson is to be commended for his effort to begin the arduous task that would to become an extended project attracting the assistance of volunteers.

This effort was necessary as the first step to be taken to complete the interior of the addition that will become a store room and work shop area, hidden from the general public, but necessary for the everyday operation of the observatory.



Attention:
HISTORICAL OFFER

As your newsletter editor, I try to emphasize that the Martz observatory would more than likely not exist today in its present form with the Kohl Observatory if it had not been for a group of amateur astronomers who formed the Astronomers Guild back in 1934. It was through their vision to build a large telescope to replace their handcrafted six inch telescopes and to have had fortitude to relocate a Warren, Pennsylvania, observatory to Jamestown on Marlow Road, where it remained until the 1960's. Today there is a historical marker where the observatory had stood the test of time.

The Guild Observatory inspired many people with its 10-inch Newtonian, 96-inch focal length telescope. This is where we find Dr. LoPresto's name before he went on to college to become a leading solar astronomer, and Marshal Martz, the musician, before he studied astronomy and many other familiar names we would recognize today that are recorded in its guest registers.

The reason for this article is the fact that the Guild 10-inch telescope still exists and I have it in my possession. This telescope is perhaps the heaviest 10-inch anyone has ever witnessed. It was built for absolute stability. Images were taken before the advent of CCD imaging, using 4x5" glass plates that recorded the images using a Speed Graphic camera.

The telescope has two identical mirrors. When the telescope was built, aluminizing was not the practice. The surface of a reflecting mirror was coated with silver. The reason for two mirrors was that one mirror was used for six months, then exchanged for the other mirror to keep ahead of the deteriorating silver coating to optimize good viewing.

The views from this long focal length are exceptional. Clearly the pole caps on Mars can be viewed, as well as some other identifiable surface features. A large dust storm was detected at one point and a drawing of the event was taken to Cornell to present during an Astronomical Convention. The view of Saturn was always superb as well as Jupiter with its four Galilean moons.

The time has come to offer this telescope to someone who can appreciate owning a historical clock driven instrument with excellent optical and mounting qualities, all for a donation to the Martz/Kohl Observatory. The M/K Observatory has possession of a silo dome in good condition that could be converted as a rotating dome, available free of charge. Another way to protect the telescope would be to build a roll off roof structure. The M/K Observatory has an example of such a structure for reference and there are many more to see on the web.

The following information and views will indicate the historical background of this instrument. For more information, please contact Richard Carlson at reckc@windstream.net.

WN POST, THURSDAY MORNING, MARCH 29, 1934.

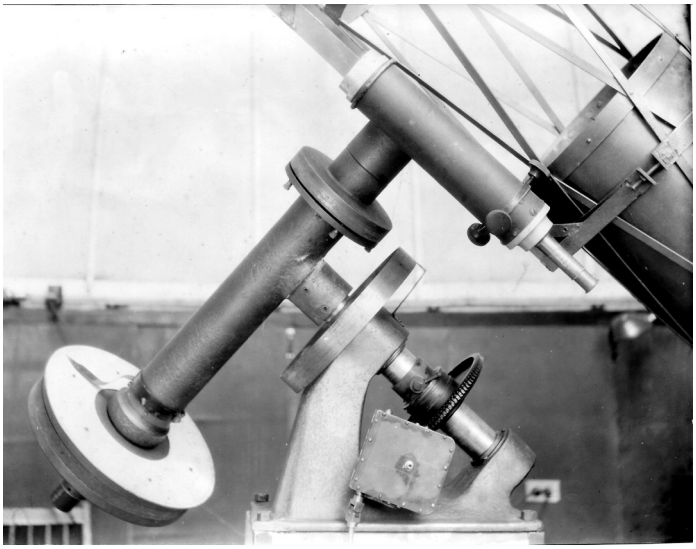
Astronomers' Guild Members See Moon Through Telescope

The Astronomers' Guild of Jamestown has adopted a constitution and by-laws and completed its organization. Also there wa exhibited at a meeting of the club the first reflecting telescope completed by one of the members. The telescope stands considerably over six feet high and through it, the members viewed the mountains and volcanic craters on the moon. The moon was in especially favorable position for observation on that evening. The telescope itself would be a credit to a professional manufacturer, yet practically every part of it, including the grinding of the concave mirror, the "eye" of the telescope, was done by the Guild members. It represents the expenditure of a very large amount of time and painstaking effort and a comparatively small cash outlay.

The Guild plans to have an exhibit of its work in a downtown store window some time in the near future. In this will be shown the telescope mentioned, other telescopes, telescope parts and other scientific instruments, in various stages of completion. It is one of the aims of the Guild to stir interest in scientific matters and they hope to further this aim by the exhibit.

The Guild is desirous of enrolling as members those who will show their interest in its work in some concrete fashion. Any who are interested are invited to communicate with the president, Elwood Johnson, 298 South Main Street.

View of heavy duty clock driven



View of long focal length 10 inch telescope being offered

REASONABLE CARE BEING TAKEN

Following more than a year of closed doors because of the virus that brought most of the country's venues to a near standstill, the Martz-Kohl Observatory slowly emerged to open its doors following all guidelines set forth to provide a safe setting for its guests.

The reemergence involved walk-ins and small groups who had made reservations with the intention of keeping the numbers of their visitors low in order out to maintain social distancing. No individual programs were presented at this time. Tours of the observatory were given. Telescope viewing with explanations were included by docents who described the objects being viewed in detail.

Following telescopic observations, our guests were directed to the classroom for a viewing of several astroimages taken at the observatory which included a question and answer period.

The observatory is open to the public on selected days and evenings. A visit makes a great Sunday drive or ride. Check out our open hours and/or make a group reservation on our website: martzobservatory.org/

A million dollar view from the top of Chautauqua County where the observatory is located