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### OU Observatory

“There’s been talk about moving the observatory,” says University of Oklahoma Astronomy Professor Bill Romanishin, “but I don’t want it to happen.” It turns out the sixty-three year-old observatory has some advantages after all. The building in which the OU observatory resides was built as a WPA project in the 1930’s, with the observatory dome being added two years later (University 12). Its age is easy to tell, both from the outside and the inside.

The observatory building is a small square two floor structure, built of the typical red brick that characterizes most of the buildings on the University of Oklahoma’s campus. However, that is where the similarities end. In contrast to the collegiate gothic architecture of Memorial Union and Old Bizzell Memorial Library and the modern architecture of Sarkeys Energy Center and Carson Hall, the observatory has its own unique style, a total lack of style. The red brick cube, stained white in places due to sixty-five years of exposure to the elements, has no noticeable features besides the observatory dome that rests on its roof and the metal fire escape like staircase that rises up the west side of the building.

Ironically, the OU Landscape and Gardens office resides on the first floor of the building, one of the ugliest on campus. A meager attempt was made to beautify the building, by planting flowers and shrubs around its base, but the effect was marginal at best. The east side of the building is also connected to a long line of garages that house maintenance vehicles.

The observatory offices reside on the second floor of the building, accessible from the

outside staircase. The second floor windows are covered with tinfoil on the inside to reflect radiant energy from outside. A small air conditioner precariously leaning out one window provides the only cooling for the observatory. On most days, multiple windows are left open to keep the offices cool.

The outside staircase leads past the door in the middle of the second story to the roof of the building where the approximately twenty-foot diameter white observatory dome rests. Although the dome is nearly as old as the building, it is in much better condition. “The dome’s main function is to keep out snow, rain, and wind, and this one still does that job as well as any,” says Romanishin.

The outside of the observatory is in bad enough shape, but, upon entering the observatory, the situation does not get any better. In the observatory offices there are partly disassembled computers, boxes and bookshelves scattered about in a haphazard fashion. The floor is covered with discolored tiles dating back to the building’s construction, and the walls are a dingy shade of white. However, according to Romanishin there is one slight upside, “we just got a network connection here this year, so I can do my work from here instead of my office at Nielsen Hall.”

Going up the narrow staircase to the observatory dome, the technological innovation is even less impressive. A fat and short telescope, very new and modern looking, sits in the middle of the room. It looks much different than the long skinny telescopes most people imagine. The telescope is connected with multiple cables to a desktop computer that both controls the movements of and takes images from the telescope. It is an older computer, with a large case and an angular shaped mouse, outdated from the computers now available at Wal-Mart for just a thousand dollars.

Looking at the dome from the inside gives a remarkably different impression than from

the outside. Bare metal and exposed gears give an impression of the dome's age. Romanishin's explanation that, "the dome used to be turned by a crank, but a student put in a motor for a senior project a few years ago," only adds to the feeling of age. Even with the motor, the situation is not ideal. As the motor clicks on, the dome begins to turn very slowly, clanking as it passes each tooth on the gear. It is far from the smooth, quiet movement that would be expected at a modern observatory. Also, the aperture of the dome did not benefit from this technological innovation and must still be opened by a hard to turn hand crank.

There are still further problems that the observatory suffers from, one of which is sitting in the shadow of the Towers. "At the last public viewing, by the time the lecture was over and we went to the observatory, the moon was already setting behind the Towers," recalls Romanishin. However, there is still an even greater problem. Romanishin admits, "lights from the city make it hard to see faint objects. We have a good telescope, but the high amount of light here makes it hard to see anything but very bright objects like the Moon, Saturn, and some comets."

There was a proposal last August to move the observatory to a new location at Nielsen Hall (Grossman). However, Professor Romanishin is opposed to the idea because of the very construction of the current observatory. When the observatory was added to the building "the telescope was mounted on a concrete pier that goes all the way to the ground," according to Romanishin. This keeps the telescope from shaking, but even with it, "when a bus goes by, the telescope still shakes a little."

This concrete pier reaches down from the observatory through the middle of the rooms on both the first and second floors. It is a square column only about two feet on each side, but it is critical to the operation of the telescope. Romanishin says that without it "the telescope would be

shaking all the time.” If the observatory moved to Nielsen Hall it would lack the distinct advantage of having a solid foundation.

As well as lacking the concrete pier, a new observatory at Nielsen Hall would gain few advantages over the old one. The field of vision may be a bit clearer, but then the Physical Science Center and Bizzell Memorial Library clock tower would begin to block the view of the sky, although not as badly as the Towers had. However, the biggest problem with the current observatory, the high level of light from the surrounding city, would continue to be a problem at a new observatory.

“We have a good telescope, the dome is still in good shape, there is just too much light,” says Romanishin. “It’s not at all uncommon for a university to have an observatory. In fact many have observatories better than this one, located away from cities and lights.”

The OU Observatory is still very useful, but maybe not for cutting edge research or viewing faint objects. The observatory instead fills the primary function of teaching students. Introductory classes use the observatory to get acquainted with how a telescope works, while upper level classes learn how to process digital images from the telescope. The observatory also plays a role in the university community as a whole. It hosts three “Friday Night at the Observatory” programs each year. At these programs anyone can attend a lecture and see the observatory. Around sixty people came to the last program, and the moon setting behind the Towers proved to be only a minor setback for them (Romanishin).

It is unlikely the observatory will be moving soon, but it might not matter much anyway. After seeing the observatory, it is clear that Professor Romanishin and the Physics and Astronomy Department will find a way to make good use of the very limited resources that are available to them. If they can use five-year-old computers and student built motors, they can make due with

whatever they are given. Regardless of where the observatory is located or what problems it suffers from, the Physics and Astronomy Department will continue to provide astronomy students with valuable first hand experience and the OU community with an interesting and education way to spend a Friday night.

Works Cited

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