## AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

The McDonald Observatory is the renowned astronomical research unit of The University of Texas at Austin and is situated on two peaks in the Davis Mountains, where the night skies are among the darkest in the continental United States. The year 2019 is a special year for the McDonald Observatory, as it marks the 80th anniversary of its establishment and the 80th year since the dedication of the Otto Struve Telescope. Still in use today, the telescope was the second-largest telescope in the world at the time and promised exciting new insights into the universe.

This year also marks the 50th anniversary of the first projection of light from the earth to the moon. Observatory researchers succeeded in the celestial projection by aligning the Harlan J. Smith Telescope with optics placed on the lunar surface by the Apollo astronauts. This scientific feat enabled researchers to accurately determine the distance between the earth and the moon and the precise orbit of the moon. The observatory has continued to lead the way in pioneering research through its impressive array of telescopes and astronomical monitoring systems.

In 2017, the Hobby-Eberly Telescope began collecting data for the Dark Energy Experiment, a project that has yielded the largest map of the universe ever produced. The University of Texas at Austin has partnered with other universities and research institutions around the world to construct the Giant Magellan Telescope in Chile. The expansive, next-generation telescope will help researchers better understand the origins of planetary systems, stars, galaxies, and black holes.

The McDonald Observatory has earned a reputation for excellence in kindergarten through 12th grade astronomy education and public outreach programs and has become one of the state's greatest resources for teachers, students, astronomy enthusiasts, and curious members of the public. The McDonald Observatory has kept the Lone Star State at the forefront of astronomical research. Observations and discoveries made at the research center have had profound implications for the development of astronomical study and will continue to shape our understanding of the universe long into the future.

## RESOLVED

That the 86th Legislature of the State of Texas commend the staff and researchers at the McDonald Observatory for pushing the frontiers of technology and science and congratulate them on 80 years of research on the properties of the universe.

That a copy of this resolution be prepared for the observatory as an expression of esteem from the Texas Legislature.

