## Site 761

## Yerkes Observatory

The astronomical observatory of the University of Chicago, at Williams Bay, Wisconsin on Lake Geneva. It is the university's principal center for research and graduate instruction in astronomy and astrophysics. The observatory was founded in 1892 when Charles Tyson Yerkes (q.v.) presented the university with funds sufficient for the building and equipment. The major instrument is a refracting telescope, completed in 1897, with an aperture of 40 inches and a focal length of 62 feet; this is the worlds largest refractor. In addition, there are two reflecting telescopes with apertures of 24 inches, and a number of small instruments designed especially for photographic and spectroscopic studies of such atmospheric phenomena as the aurora borealis. Since 1932 the University of Chicago has cooperated with the University of Texas in the operation of the latter's McDonald Observatory at Fort Davis, Texas.

Observational programs conducted with the telescopes at the Yerkes observatory and with the 36-inch and 82 inch reflecting telescopes at the McDonald Observatory make use of a variety of photographic, photometric, and spectroscopic techniques. These studies, largely astrophysical, include investigations of the physical properties of stars observed singly and in clusters, the structure of our galaxy, and the structure and dynamics of other galaxies. There are other programs for the observation of double stars, planets, comets, asteroids and the aurora. The Yerkes Observatory is also a leading center for theoretical work in astrophysics.

