

## TEXT B. THE UNIQUE TELESCOPE

association *n* — объединение  
candle flame — пламя свечи  
clear *a* — ясный  
dome *n* — купол  
image *n* — изображение  
mirror *n* — зеркало

naked eye — невооруженный глаз  
polish *v* — полировать  
recent *a* — недавний; эд. последний  
remote *a* — удаленный  
tower *n* — башня  
view *n* — вид, картина

For more than four centuries telescopes have been the Earth's window on the universe. But the views they give have been limited by the size and shape of the instruments. Now scientists in many countries are developing bigger telescopes that will enable astronomers to look deeper into the corners of the universe. The main principle of a telescope is: the larger the mirror, the clearer and brighter the reflected image will be.

The world's largest optical telescope is in the North Caucasus at 2,100 metres above the sea level. It was designed and created at the Leningrad Optical and Mechanical Association (LOMO). The main part of the telescope is the mirror which is six metres in diameter and weighs 42 tons. The mirror's area is about 30 square metres and it has been polished to the highest degree of accuracy. The telescope is housed in a tower with a revolving 1,000-ton dome.

Many countries have developed large-size optical telescopes in the recent 30 years, but this telescope is the most powerful. The following gives an idea of what the telescope can do. With this telescope a candle flame can be seen from a distance of 25,000 km. Its power is 40-50 million times greater than that of a naked eye. With this telescope astronomers can investigate the most remote bodies in the universe. It will help to solve many important scientific problems, thus making a great contribution to the mankind's knowledge. Astronomers have used the telescope to take several unique photographs of stars. The development of this unique telescope is a great achievement of Russian science and technology.