

A MEMORIAL

RECOGNIZING THE NATIONAL RADIO ASTRONOMY OBSERVATORY'S VERY LARGE ARRAY RADIO TELESCOPE FOR ITS PROMINENCE IN THE FIELD OF ASTRONOMY AND FOR ITS CONTRIBUTIONS TOWARD THE ADVANCEMENT OF SCIENTIFIC KNOWLEDGE.

WHEREAS, the very large array radio telescope, situated outside of Socorro, New Mexico, is one of the world's premier astronomical radio observatories; and

WHEREAS, the very large array radio telescope is an exceedingly powerful scientific instrument, which has transformed many areas of astronomy in its years of operation; and

WHEREAS, the array operations center is located on the campus of the New Mexico institute of mining and technology, which also provides scientific, engineering, technical, computer and support staff for the very large array radio telescope as well as the very long baseline array radio telescope; and

WHEREAS, the very large array radio telescope has a long history in New Mexico, having been approved by congress in 1972, constructed between 1973 and 1980 and dedicated in 1980; and

WHEREAS, the very large array radio telescope in New Mexico is still the most productive astronomical instrument on

earth; and

WHEREAS, it consists of twenty-seven radio antennas, each of which is eighty-two feet in diameter, placed in a Y-shaped configuration; and

WHEREAS, data from the twenty-seven antennas are combined electronically to give the resolution of an antenna twenty-two miles across, with the sensitivity of a dish four hundred twenty-two feet in diameter; and

WHEREAS, Socorro, New Mexico, was chosen as the best possible location for the very large array radio telescope, based on the local climate and topography, its distance from major metropolitan areas and its proximity of good roads; and

WHEREAS, the very large array radio telescope is used by astronomers from around the world to conduct fundamental research on the nature of the universe and to seek answers to some of the biggest questions, such as how the universe began, how big it is, how old it is and how it will end; and

WHEREAS, the very large array radio telescope is also used for atmospheric and weather studies, satellite tracking and other miscellaneous scientific procedures; and

WHEREAS, astronomy stirs scientific curiosity in thousands of young people every year, who learn that astronomy involves nearly the whole range of the physical sciences, including mathematics, physics, chemistry, geology, engineering and computer science; and

WHEREAS, many professional scientists in these and other fields first became interested in their profession through astronomy; and

WHEREAS, in today's world marketplace, a competitive nation needs its entire population, not just its scientists, to have a basic level of scientific literacy; and

WHEREAS, astronomy, by providing the excitement of new knowledge about the fascinating variety of strange objects in the universe, can help communicate basic scientific knowledge to all people; and

WHEREAS, the very large array radio telescope is of economic benefit to New Mexico, in that it employs up to a hundred people on any given day, who work to keep the telescope in good working condition; and

WHEREAS, the popular and award-winning movie "Contact" was filmed in part at the very large array radio telescope, which increased tourism to the area and has further supported the local economy; and

WHEREAS, the national radio astronomy observatory, which operates the very large array radio telescope, is a facility of the national science foundation, which is operated under cooperative agreement by associated universities, incorporated;

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE STATE OF NEW MEXICO that the national

radio astronomy observatory's very large array radio telescope be recognized for its significant contributions to science and to the state of New Mexico; and

BE IT FURTHER RESOLVED that copies of this memorial be transmitted to the directors of the national science foundation and the national radio astronomy observatory.