

HOUSE JOINT MEMORIAL 4

48TH LEGISLATURE - STATE OF NEW MEXICO - FIRST SESSION, 2007

INTRODUCED BY

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A JOINT 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,

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1 computer and support staff for the very large array radio  
2 telescope as well as the very long baseline array radio  
3 telescope; and

4 WHEREAS, the very large array radio telescope has a long  
5 history in New Mexico, having been approved by congress in  
6 1972, constructed between 1973 and 1980 and dedicated in 1980;  
7 and

8 WHEREAS, the very large array radio telescope in New  
9 Mexico is still the most productive astronomical instrument on  
10 earth; and

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

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

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

22 WHEREAS, the very large array radio telescope is used by  
23 astronomers from around the world to conduct fundamental  
24 research on the nature of the universe and to seek answers to  
25 some of the biggest questions, such as how the universe began,

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1 how big it is, how old it is and how it will end; and

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

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

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

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

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

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

24 WHEREAS, the popular and award-winning movie "Contact" was  
25 filmed in part at the very large array radio telescope, which

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1 increased tourism to the area and has further supported the  
2 local economy; and

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

7 NOW, THEREFORE, BE IT RESOLVED BY THE LEGISLATURE OF THE  
8 STATE OF NEW MEXICO that the national radio astronomy  
9 observatory's very large array radio telescope be recognized  
10 for its significant contributions to science and to the state  
11 of New Mexico; and

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

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