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HOUSE MEMORIAL 18

48TH LEGISLATURE - STATE OF NEW MEXICO - SECOND SESSION, 2008

INTRODUCED BY

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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,

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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 HOUSE OF
8 REPRESENTATIVES OF THE STATE OF NEW MEXICO that the national
9 radio astronomy observatory's very large array radio telescope
10 be recognized for its significant contributions to science and
11 to the state 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.