

Supermoon Bounce

September 27, 2015

A rare phenomenon, there have only been [five supermoon eclipses](#) since 1900 (in 1910, 1928, 1946, 1964 and 1982). The next supermoon eclipse will occur in 2033.

A supermoon occurs when a new or full moon is at its closest to the Earth. Because the orbit of the moon is not a perfect circle, the moon is sometimes closer to the Earth than at other times during its orbit. When the moon is farthest away it's known as apogee, and when it's closest it's known as perigee. The supermoon of September 27, 2015 was a perigee full moon—the closest full moon of the year."

At perigee, the moon is about 31,000 miles closer to Earth than at apogee. This proximity makes the moon appear 14 percent larger and 30 percent brighter in the sky than an apogee full moon, hence the term "supermoon."

Don Brown WØAF had 13 on hand at his rural Glenwood QTH to watch and play radio.



Earth–Moon–Earth communication (EME)

From Wikipedia, the free encyclopedia

The use of the Moon as a passive communications satellite was proposed by W.J. Bray of the British General Post Office in 1940. It was calculated that with the available microwave transmission powers and low noise receivers, it would be possible to beam microwave signals up from Earth and reflect off the Moon. It was thought that at least one voice channel would be possible.^[1]

The "moon bounce" technique was developed by the United States Military in the years after World War II, with the first successful reception of echoes off the Moon being carried out at Fort Monmouth, New Jersey on January 10, 1946 by John H. DeWitt as part of Project Diana.^[2] The Communication Moon Relay project that followed led to more practical uses, including a teletype link between the naval base at Pearl Harbor, Hawaii and United States Navy headquarters in Washington, DC. In the days before communications satellites, a link free of the vagaries of ionospheric propagation was revolutionary.

Later, the technique was used by non-military commercial users, and the first amateur detection of signals from the Moon took place in 1953.

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Bill Pugsley WØZVW built a 2 meter yagi antenna and demonstrated EME during the super moon.



