

Report on "Detection of Radar Signals Reflected from the Moon, 1946"

The proposal under consideration represents a very remarkable achievement in the history of communications technology. Just before artificial satellites, the conception of the moon as natural wireless relay in order to overcome the drawbacks behind the ionospheric communication systems, was a very innovative proposal at the time.

Although originally conceived by General British Post Office as early as 1940, the first proof of concept was made few years later, in 1946, by the USA Army Signal Corps, when they were able to detect earth transmitted radar waves bounced off the moon. Such a success served as the inspiration for later Earth-Moon-Earth (EME) communication techniques.

Such a proof of concept was carried out at a laboratory at Camp Evans in Wall Township, New Jersey, so the location being proposed for the milestone plaque has, as a consequence, a direct and logical connection with the work.

This Milestone truly represents a significant achievement, as it was the first experiment to make use of a celestial body for wireless communications, so demonstrating the feasibility of using the Moon as a passive reflector to transmit radio signals from one point on the Earth to the other, around the curve of the Earth, previously to the artificial satellites era. Additionally, it marked the birth of a new discipline which was "radar astronomy", later used to map Venus and other nearby planets.

The proposal is adequately supported by significant references and citations, so I definitely support the veracity and significance of this work as a new IEEE Milestone.



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