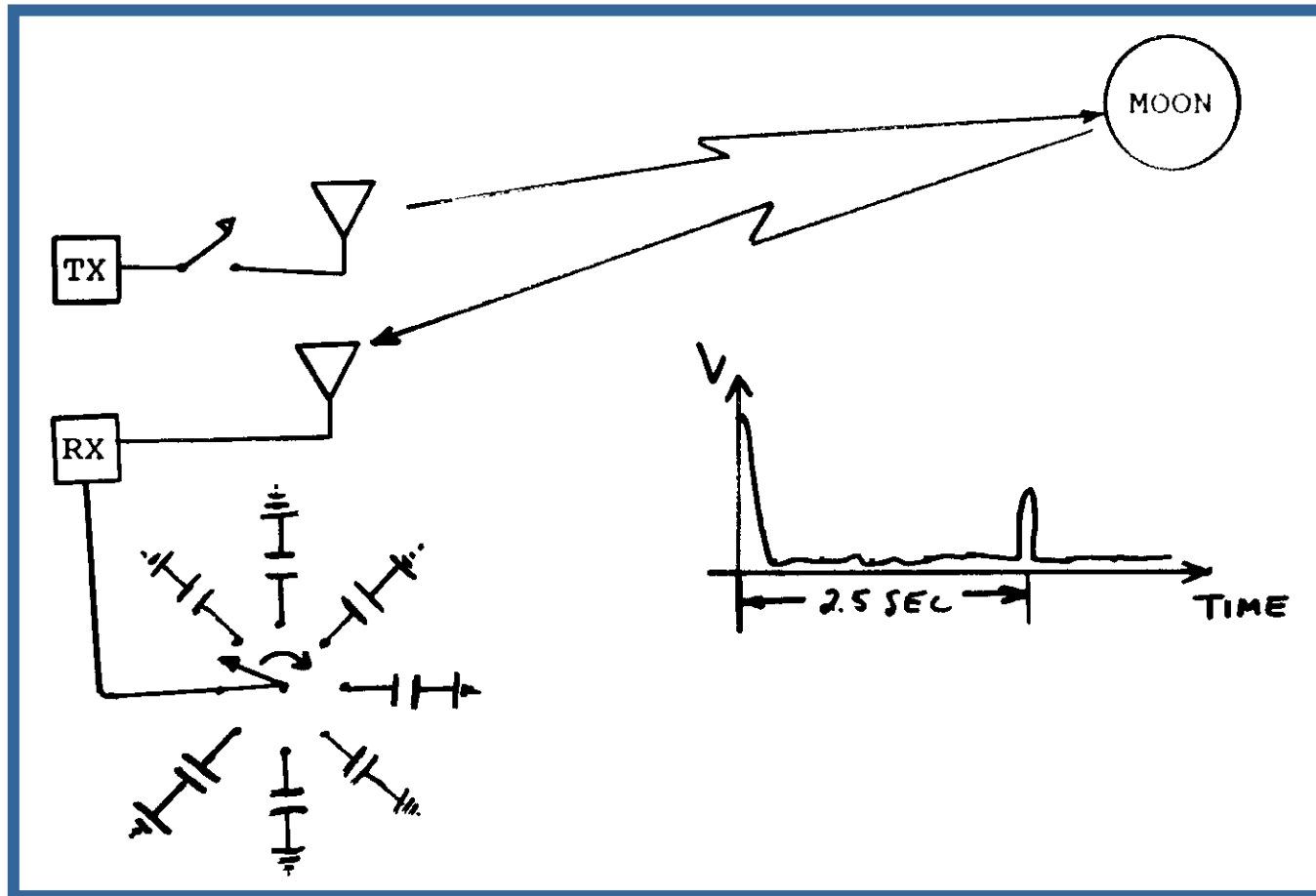


FIRST APPLIED IN RADAR

DIANA RADAR (115 MHz)
8 KW TO COLLINEAR ARRAY W4ERI IN CHARGE

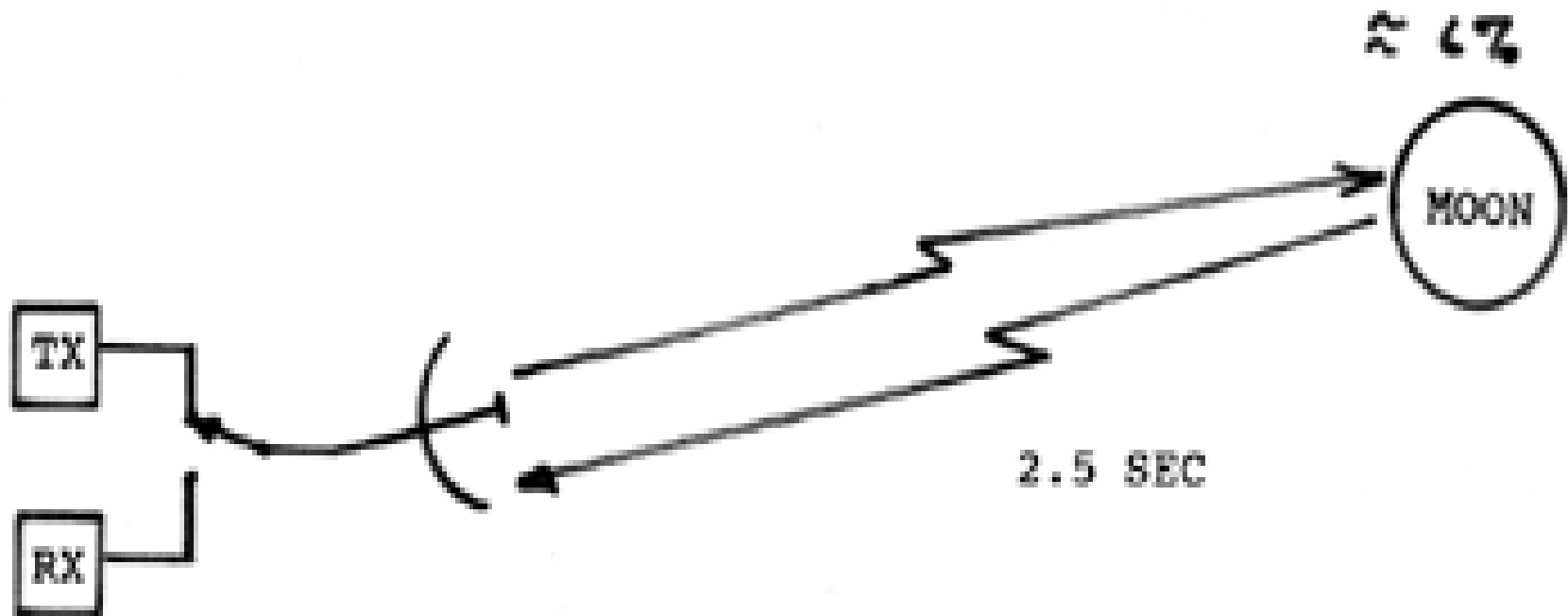


ANALYZED REPEATED TRANSMISSION OF A PULSE

AMATEURS WERE AMONG 1ST TO EXPERIMENT WITH EME COMMUNICATIONS

- ECHOES REPORTED ON 144 MHz IN 1953
- AMATEUR 2-WAY COMMUNICATION IN 1960
- ALL CONTINENTS WORKED IN 1976
- 10 GHz EME IN 1989

EME SYSTEM



$$P_L = 10 \text{ LOG } (D_M \text{ WL } \sigma / 16 \pi^2 R^4)$$
$$= 261 \text{ dB (AT 432 MHz)}$$

EME MILESTONES

