



Harold E. "Doc" Edgerton

1903-1990

"Doc" Edgerton was an electrical engineer who pioneered the use of electronic flash for ultra-short exposure photography. While studying power generators, Edgerton

noticed that flashes of light from mercury rectifiers made a generator's rotors appear to stand still. He recognized the opportunity to invent a lamp that could "freeze" motion with rapid pulses of intense light. This led to his use of a stroboscope as a high-powered reusable electronic flash for photographically capturing short-duration phenomena.

In 1947 Edgerton teamed with two colleagues to form the company which would become EG&G, the prime contractor for the Atomic Energy Commission tasked to photograph and record US nuclear tests. Under Edgerton's guidance, EG&G developed and manufactured the Rapatronic camera - a high-speed imaging system capable of exposure times as short as 10 nanoseconds. Eventually EG&G grew into a Fortune 500 company, one of the top providers of technical services to the US government and industry.

Edgerton was also instrumental in the development of side-scan sonar technology, used to scan the sea floor for shipwrecks. He worked with the undersea explorer Jacques Cousteau by first providing him with custom designed underwater photographic equipment featuring electronic flash and then by developing sonar techniques used to discover the sunken British ship, HMHS Britannic.

Edgerton received numerous awards throughout his career, including the National Medal of Science in 1973. He also received an Academy Award in 1940 for his short film "Quicker'n A Wink."