

Outline

Thesis Statement: Robert Goddard was one of the most influential people on the development of modern rocketry and jet propulsion, although he was not acknowledged for his accomplishments during his lifetime.

- I. Goddard's childhood not conducive to education
 - A. In and out of school due to health problems.
 - B. Primarily self-taught.
 - C. Two years older than other students on entering high school.
- II. Good academic career.
 - A. Graduated from Worcester Technical School in 1908.
 - B. Ph.D. from Clark University in 1911.
 - C. Published various scientific articles on many subjects.
- III. Continued rocketry research after graduation.
 - A. Took teaching position with Clark University.
 1. Did research while on staff in various university labs.
 2. Used various labs because constantly moved due to complaints.
 - B. Received patent for multi-stage rocket in 1914.
- IV. "A Method of Reaching Extreme Altitudes"
 - A. Received scathing ridicule from many media sources in response to a paper published by the Smithsonian Institute.

- B. *New York Times* one of more vicious editorials--“Correction” printed in 1969, three days before first lunar landing.
 - C. One of Goddard’s most famous quotes in response to *Times*: “Every vision is a joke until the first man accomplishes it; once realized, it becomes commonplace.”
- V. Goddard’s funding primarily from private sources.
- A. Begun by Smithsonian Institute.
 - B. Later funded by Harry Guggenheim and Charles Lindbergh.
- VI. Goddard married.
- A. Esther Christine Kisk in 1924
 - B. Became assistant and traveled with Goddard
 - C. Present for Goddard’s first liquid fueled rocket launch in 1926
- VII. Goddard’s involvement with military
- A. Failed to interest the army in using rockets as a weapon
 - B. Demonstrated a prototype “Bazooka” in 1918
 - C. Worked with the Navy during World War II
- VIII. Goddard’s failing health
- A. Diagnosed with throat cancer in 1945
 - B. Died on August 10, 1945, four days after atomic bombing of Japan
- IX. Goddard’s posthumous achievements and awards
- A. Received many awards after his death
 - 1. Congressional Medal in 1959
 - 2. The Langley Medal in 1960
 - 3. The Daniel Guggenheim Medal in 1964

4. The National Space Hall of Fame induction in 1966
 5. The Aviation Hall of Fame induction in 1966
 6. National Inventor Hall of Fame induction in 1979
- B. Clark University exhibition room to Goddard.
1. Contains awards given
 2. Contains *Autobiography of Robert Goddard* and the U.S. Flag flown to moon aboard Apollo 11
- C. Received 131 patents posthumously, bringing total to 214
1. Estate awarded \$1,000,000 from U.S. Government
 2. Largest to date patent infringement settlement
- X. Goddard's role in science
- A. Papers inspired many other scientists worldwide
1. Responsible for the creation of German Rocketry Society, which included Werner Von Braun
 2. Given credit by scientists who immigrated to work on space program
- B. Traditionally known as "The Father of Rocketry"