

ROCKETING THROUGH THE LIFE OF ROBERT GODDARD  
IN CELEBRATION OF GODDARD DAY 1997  
Created by the Auburn Middle School 8<sup>th</sup> Grade Blue Team

CAST OF CHARACTERS (Each responsible for own costume and props.)

Narrator (could divide script in 2 parts)

Mom (Fannie Louise Hoyt)

Dad (Nahum Danford Goddard)

Grandmother (Mary Pease Upham Goddard)

Boy Goddard

Teenaged Goddard

HS graduate Goddard

Professor Goddard

"Moon man" Goddard (could be Professor too)

NM Goddard

Dying Goddard

College Student

General

Esther C. Kisk

Aunt Effie Ward

Assistants: Henry Sachs  
Percy Roope

Auburn policeman and Auburn neighbors played by whole cast

Auburn Fire Marshal Neal

Charles Lindbergh

NASA Representative

Neil Armstrong

Stage Artists: Title Sign, narrators' stool/ cherry tree, and Rocket for Scene 9

Title by Jonathan Fox

OPEN WITH TITLE SIGN & INTRO  
"Space Odyssey 2001" Theme in background

SCENE 2

**Narrator:** On October 5, 1882 Nahum Danford Goddard and Fannie Louise Hoyt gave birth to a baby boy in Worcester, Massachusetts.

**Mom:** Oh Nahum, look! What a beautiful baby!  
(holds up doll)

**Dad:** Yes Fannie, he will be a fine son!

**Grandma:** You will make a fine mother Fannie. You should name him Nahum, Jr.

**Dad:** No Mother, we will name him Robert Hutchings. Fannie and I decided on it.

**Grandma: Humph!** (storming out of room)

**Narrator:** Mary, Robert's grandma was a take-charge kind of person. She insisted on taking care of the baby. Nahum moved the family to Roxbury near Boston to escape his mother's protectiveness.

Dad walks off with baby carefully and mom watches little boy approach

Coil

By Rochana Perkins

SCENE 3

**Boy Goddard: z-z-z-z-zoom** (comes onto stage flying a zinc battery and scuffing his feet along floor comes in and then jumps off an imaginary fence)

**Mom:** Robert! What are you doing?

**Boy:** Well Mother, I'm trying to fly electrically by carrying this zinc battery rod. I figure that if I scuff my feet and then jump off this fence, I'll be able to fly.

**Mom:** Please be careful because sometime it might work and you'll go sailing away, **without being able to come back!**

**Boy:** I better go hide this rod before that really happens! (laughs)

Both hurry off stage.

Rhodes, Richard. "God Pity a One-Dream Man," *American Journal*, June/July 1980.

By Alyssa Kim and Kara Moss

Mr. Bullerwell has batteries

SCENE 4

**Goddard:** (reading a book in a cherry tree and turns page)

Hmmmm "They had all [understood] the idea in an instant and saw no difficulty in it. Well, no one has tried it, so maybe I should." (shuts book and jumps down)

If Jules Verne can fly in a balloon in his story, why can't I? I'll construct it of aluminum because of its durability and it is light weight. Also, it's the only thing I can afford.

**Narrator:** 100 years ago (February 19, 1898) the balloon failed, but led Bob to think about sending a super powered rocket into outer space. As a teenager, the black cherry tree in his Grandmother's backyard was his favorite place to look up at the sky and ponder the possibilities of creating a device to ascend to Mars.

Coil

By Tim Elliott, Jason Denaris, Ryan Jennings, Joshua Martin and Bonnie Obremski

## SCENE 5

**Narrator:** As Valedictorian and class president, Bob addressed the 1904 graduating class of South High School on the subject "On Taking Things for Granted."

**Adult Goddard:** (solemnly in graduation robe and mortar board holding a diploma)  
"...it is dangerous to believe hastily that anything is either possible or impossible..."

no one can predict to what heights of wealth, fame, or usefulness he may rise until he has honestly endeavored...

it has often proved true that the dream of yesterday is the hope of today and the reality of tomorrow."

**Narrator:** Believing that, "Anything is possible with the man who makes the best use of every minute of his time." Bob went on to earn a Bachelor of Science degree from Worcester Polytechnic Institute and his master's and doctorate in physics within 2 years at Clark University.

"The Goddard Papers," November 9, 1964 and Coil.

By Caitlin Johnson and Shauna O'Connor

## SCENE 7

**Narrator:** Goddard's work was interrupted by World War I. He had received patents for a multi-stage rocket and research grants from the Smithsonian. After the United States entered the war he wrote to the Smithsonian suggesting military uses for rockets and offered his services. The U.S. Army Signal Corps took him up on his offer.

**Goddard:** General, I must move to California. I think someone has been spying on me and tried to break into my lab. I have several kinds of solid propellant rockets to show you. One is a long-range bombardment rocket which doesn't require a cannon to launch it. A soldier could balance the light-weight recoilless launcher on his shoulder. It could stop tanks!

**General:** We are impressed by your war rockets, Dr. Goddard. We could call it a bazooka!

**Narrator:** Four days after the test, the war ended and the plans to produce Goddard's rocket were put on a shelf until they were needed in the next war. Many of Goddard's patents were bought by the Germans for \$.35 each and used to develop the V-1 and V-2 rockets of World War II.

Coil and Farley, Karin Clafford. Robert H. Goddard. Englewood Cliffs, NJ: Silver Burdett, 1991.

By Clint Albano, Andy Ashe, Pete Beaulac, James Donohue, Ross Earley, Jonathan Fox, Dave Mahoney, Keith McEachern, Tim Miller, Sarah Paradise, Erin Pike, Kim Seymour and Kajahl Valipour

## SCENE 6

**Narrator:** In 1914 Dr. Goddard taught physics part-time at Clark University while running experiments in the university's basement laboratories.

**Professor Goddard:** Attention class. I am here to teach you about my new idea for a liquid fueled rocket.

**Student:** What is the advantage of this rocket, sir?

**Prof.:** The fuel tank of the combustion mechanism is very simple and light weight. I think these types of rockets might help send people to the moon and beyond some day.

**Student:** Have you had a successful launch yet?

**Prof.:** I've had many failures, but the more I experiment, the more I learn.

**Student:** Where do you work on these experiments?

**Prof.:** After that last explosion in my lab, I now set off signal rockets at my Aunt Effie's farm up on Pakachoag Hill. Does anyone else have a question? I will be happy to help you.

**Narrator:** Even with his busy schedule, Dr. Goddard was an enthusiastic teacher who took the time to help his students with anything they didn't understand.

Dille, John. Americans in Space. New York: American Heritage Publishing Co., 1965.

By Erin Pike and Stephanie Szklarz

## SCENE 8

**Prof.:** (Walking into Clark University President's office with a pile of manuscripts in his hands to desk where the secretary, Miss Esther Kisk, sits at her desk.) These are the manuscripts President Sanford wanted to see.

**Esther:** Oh yes, Professor Goddard, he told me you would need them typed. I'll get right to them.

**Prof.:** Thank you Esther, I really appreciate your help.

**Narrator:** This meeting was the first of many as Esther organized Goddard's notes. They discovered they had many common interests of science, art and music. And one day...

**Robert:** (on his knees in front of Esther) Esther, I love you very much. Will you be my wife?

**Esther:** Oh yes, Bob.

**Narrator:** On June 21, 1924 they were married in St. John's Episcopal Church. Esther became her husband's photographer, bookkeeper, laboratory assistant and greatest fan.

Coil

By Lauren Stencel and Emily Sundstrom

## SCENE 9

**Narrator:** On a cold, clear March 16, 1926 Bob and his machinist, Henry Sachs, head to Goddard's Aunt Effie's strawberry farm on Pakachoag Hill to set up a launching frame out of pipes near the sheet iron barricade that will protect them.

**Sachs:** Well, let's get started.

**Robert:** We're waiting for Esther and Percy Roope to take photos with the new motion picture camera. (waving)  
Ah, here they come now with Aunt Effie. (Esther readies her camera)

**Narrator:** At 2:30, Sachs uses a blow torch attached to a long pole to heat the igniter filled with matches and black gunpowder. After a cloud of black smoke appears, he next fires up the alcohol burner. Meanwhile, Goddard pumps in oxygen into the lines to force gasoline and liquid oxygen into the combustion chamber where the igniter is still burning.

**Sound effect:** Rocket counts softly to 3 and all make loud WHOOSH!

**Robert:** It's been 90 seconds. The thrust has built up to more force than the rocket's weight. I'll pull the release cord to free the rocket from the oxygen hose.

**Roope:** Wow, look at the white hot flame coming out of the nozzle! How come nothing is happening?

**Robert:** Be patient, Percy. It will start to move in a second.

**Narrator:** As the roar increases, the rocket rises slowly at first, and then picking up tremendous speed reaches an altitude of 41 feet. **Two-and-a-half seconds later**, all is silent as the rocket veers to the left before crashing to the snow covered field 184 feet away.

**Esther:** (hugging Robert) It looked like a fairy as it started off. Sadly, none of the flight is on film. It's too bad we cannot film for longer than 7 seconds before rewinding the film. It was a very long lift off.

**Aunt Effie:** Let's all go back to the house for some hot malted milk and then we can come back to pick up the pieces. **Your dream has come true, Robert!**

All celebrate and move off stage.

Coil

By Kerry Bartlett, Cristina Cooper, Ryan McCarthy and Pete Zuidema

## SCENE 10

**Narrator:** In July 1929, Goddard spent the morning setting up a rocket 4 times larger than his first in its 60-foot tower. Esther, who had sewed the parachute, is on hand ready to film the flight with her new Kodak movie camera. At 2 in the afternoon...

**Roope:** Look out!

**Sound effect:** All yell KA-BOOM!

**Goddard:** Everyone help find the pieces from the explosion so we can see what went wrong. The parachute didn't open, but the camera and barometer are still working. It landed 171 feet away which is a good distance.

**Police chief and neighbors run up (entire cast):**  
Get out of here! Are you trying to kill someone!  
You are disturbing our peaceful town!

**Goddard:** Don't worry. This is just one of a series of experiments in rockets. There was no attempt to reach the moon, or anything of such a spectacular nature. The rocket is normally noisy... The test was thoroughly satisfactory; nothing exploded in the air, and there was no damage except on the landing.

**Narrator:** The headline in the Worcester Evening Post read

TERRIFIC EXPLOSION AS PROF. GODDARD  
OF CLARK SHOTS HIS "MOON ROCKET"—  
WOMAN THOUGHT ROCKET  
WAS WRECKED AIRPLANE

The crazy "moon man" was surrounded by newspaper reporters, sightseers and souvenir hunters. Fire Marshall Neal visits as well...

**Fire Marshal:** Dr. Goddard you will no longer be allowed to conduct your dangerous test in the Commonwealth of Massachusetts. The townspeople of Auburn are afraid your rockets might set fire to their houses and barns.

(face Goddard and point off into distance)

Coil

By Deanna Charbonneau, Heather Flynn, Nick Galbisio, Ryan Lowe, Ryan McCarthy, Sean Murphy, Nelson Penney, Rochanna Perkins, Chris Richards Dave Tran, Chris Warner and Pete Zuidema

## SCENE 11

**Lindbergh:** (shaking Goddard's hand) Dr. Goddard, I heard about your successful experiments and just had to fly to Auburn to meet you.

**Goddard:** Welcome Charles Lindbergh, it's my pleasure to meet the first human to fly solo across the Atlantic Ocean. Every vision is a joke until the first man accomplishes it. Once realized, it becomes common place.

**Lindbergh:** How can I help you realize your vision, Bob? I think your work could lead to future travel in space.

**Goddard:** The problem is money and time to travel back and forth to my new launch site at Fort Devens.

**Lindbergh:** Hmmm. I will go ask my friend Daniel Guggenheim to fund your experiments in a better location. I'll be back! (walks off)

Clark Memorial Dedication, p. 10, and Coil

By Stephanie Barkus and Kajahl Valipour

## SCENE 13

**Narrator:** Goddard finds the wide open country of New Mexico good for experiments that fail as well as succeed. Each led to improvements in design and more patents to Goddard's credit.

**Robert:** (playing with a toy gyroscope)  
Now that we have rockets that go 2,000 feet high at speeds of 500 miles per hour, we must find a way to keep the rocket from wiggling in flight so it won't crash so soon after launch.

**Sachs:** How are your gyroscope experiments going?

**Robert:** It's ready to test on our launch today. Let's put it into the rocket.

**Both:** (fiddle around placing in imaginary rocket) OK, we're ready.

**Robert:** Would you please go tell Esther we're ready for her camera...

**Narrator:** With the gyroscopic stabilizer, the 1935 launch roared to a height of nearly a mile and a half, but achieve flights of 30 or 40 miles above the Earth, Goddard would need to develop a more powerful motor and build a much larger rocket.

Coil  
By Matt Benoit, John Benson, Nick Galbisio and Dave Tran  
Mr. Gustafson has gyroscopes

## SCENE 12

**Robert:** (writing in diary)

Dear diary, In July of 1930 we went to Roswell, New Mexico and had the shop running by October... We had a flight of about half a mile as a thrilling climax to the year in December. We couldn't have done it without Lucky Lindy's help rounding up our funding!

Verral, Charles Spain. *Rocket Genius*. New York: Scholastic Book Services, 1969.

By Chris Warner

## SCENE 14

**Narrator:** During World War II Dr. Goddard left Clark University to work with the Navy on jet takeoff devices. He also proposed rockets as anti-aircraft or anti-tank weapons, or even torpedoes. He was unable to continue his work because of throat cancer.

**Goddard:** It's just a matter of imagination how far we go with rockets and jet planes... I think it's fair to say, you haven't seen anything yet."

**Esther:** Oh Robert. You've gone so far towards fulfilling your dream that you can't die now.

**Narrator:** On August 10, 1945 one day after a second nuclear bomb was dropped on Japan, Robert Goddard quietly passed away. He is buried in Hope Cemetery in Worcester, Massachusetts.

Moore, Clyde. *Robert Goddard*. New York: Bobbs Merrill, 1966.

By Matt Benoit, John Benson, Deanna Cosenza, Jeff Fox, Bobby Jewers, Dan Koen, Shauna O'Connor, Matt Rozanski, Tim Shannon and Tom Smith

## SCENE 15

(Hold up applause sign)

**NASA Representative:** (quieting audience with thank yous and hand gestures)  
Welcome to Greenbelt, Maryland. We are here today-- March 16, 1961-- to honor Dr. Robert H. Goddard, the father of modern rocketry. We dedicate this space facility as The Goddard Space Flight Center. It will be the first scientific laboratory built entirely for the purpose of fulfilling Dr. Goddard's dream of space exploration.

(Hold up applause sign)

**Esther:** Thank you. My husband would be pleased if he were here today. I have worked hard since his death to protect 131 of his ideas which cover basic inventions in the field of rocket, guided missiles, and space exploration. There is hardly a rocket that is launched that does not carry one of Bob's ideas.

(Hold up applause sign)

Farley

By Kerry Bartlett, Stephanie Barkus, Caitlin Johnson, Sara Jordan, Alyssa Kim, Kristen Snow, Lauren Stencil and Emily Sundstrom

## SCENE 16

**Narrator:** The world watches as Neil Armstrong walks on the moon fulfilling the "moon man's" dream almost 70 years after he sat in his cherry tree thinking about how to reach the stars.

**Armstrong:** "That's one small step for man, One giant leap for mankind."

**Entire cast comes on stage to Elton John's "Rocket Man" and take a bow.**

Shelton, William R. Man's Conquest of Space. Washington, DC: National Geographic Society, 1968.

By Katelyn Allen, Tina Bastarache, Mike Bjork, Christina Cooper, Kristan Croteau, Amanda Holmes, Cayla Morin, Kara Moss, Ashley Paul, Dave Roy, Josh Scully, Seanna Sullivan and Stephanie Szklarz

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