



1
00:00:16,790 --> 00:00:15,509
rocket launches may seem commonplace

2
00:00:19,109 --> 00:00:16,800
today

3
00:00:22,950 --> 00:00:19,119
in 2018 there was an average of more

4
00:00:27,269 --> 00:00:24,950
but in the past the idea of sending

5
00:00:32,709 --> 00:00:27,279
rockets into space was purely science

6
00:00:36,790 --> 00:00:34,630
it wasn't until the early 20th century

7
00:00:38,950 --> 00:00:36,800
when a man named robert goddard tried to

8
00:00:42,709 --> 00:00:38,960
convince the world that space travel

9
00:00:47,350 --> 00:00:45,350
decades before the space age began he

10
00:00:50,069 --> 00:00:47,360
envisioned using rockets to send science

11
00:00:51,590 --> 00:00:50,079
experiments into the upper atmosphere

12
00:00:53,910 --> 00:00:51,600
beyond the heights attainable by weather

13
00:00:55,590 --> 00:00:53,920

balloons at the time

14

00:00:57,430 --> 00:00:55,600

he even imagined and calculated in

15

00:00:59,189 --> 00:00:57,440

detail what it would take to send a

16

00:01:01,110 --> 00:00:59,199

rocket carrying a massive flash powder

17

00:01:03,590 --> 00:01:01,120

to the surface of the moon

18

00:01:05,509 --> 00:01:03,600

the powder he believed could be ignited

19

00:01:07,109 --> 00:01:05,519

on the surface and would be visible from

20

00:01:08,870 --> 00:01:07,119

earth

21

00:01:10,550 --> 00:01:08,880

the public caught wind of goddard's wild

22

00:01:13,109 --> 00:01:10,560

ideas and it became the topic of

23

00:01:15,670 --> 00:01:13,119

national conversation and press

24

00:01:17,190 --> 00:01:15,680

a lot of it negative

25

00:01:19,429 --> 00:01:17,200

goddard's replied

26

00:01:21,270 --> 00:01:19,439

every vision is a joke until the first

27

00:01:25,030 --> 00:01:21,280

man accomplishes it

28

00:01:27,510 --> 00:01:25,040

once realized it becomes commonplace

29

00:01:28,950 --> 00:01:27,520

goddard persisted with his dream

30

00:01:31,429 --> 00:01:28,960

he went on to build and launch the

31

00:01:33,590 --> 00:01:31,439

world's first liquid field rocket the

32

00:01:37,350 --> 00:01:33,600

basic design of which is still used to

33

00:01:42,550 --> 00:01:40,950

in july 1969 50 years after goddard

34

00:01:43,510 --> 00:01:42,560

first proposed sending a rocket to the

35

00:01:45,749 --> 00:01:43,520

moon

36

00:01:48,870 --> 00:01:45,759

apollo 11 launched on the six and a half

37

00:01:50,870 --> 00:01:48,880

million pound saturn v rocket

38

00:01:53,590 --> 00:01:50,880

among the three astronauts on board was

39

00:01:55,670 --> 00:01:53,600

buzz aldrin

40

00:01:57,590 --> 00:01:55,680

and on his journey to the moon he

41

00:02:01,850 --> 00:01:57,600

carried with him a miniature version of

42

00:02:05,429 --> 00:02:03,190

[Music]

43

00:02:06,709 --> 00:02:05,439

thankfully goddard was not forgotten by

44

00:02:09,669 --> 00:02:06,719

history

45

00:02:12,470 --> 00:02:09,679

his name lives on to this day

46

00:02:14,630 --> 00:02:12,480

on may 1st 1959

47

00:02:17,030 --> 00:02:14,640

nasa dedicated its first space flight

48

00:02:19,190 --> 00:02:17,040

complex in his honor as the goddard

49

00:02:21,990 --> 00:02:19,200

space flight center

50

00:02:23,430 --> 00:02:22,000

60 years later the center continues to

51

00:02:25,910 --> 00:02:23,440

fulfill his vision by building

52

00:02:28,790 --> 00:02:25,920

spacecraft instruments and new

53

00:02:35,450 --> 00:02:28,800

technology to study earth the sun our