

# ARTEMIS I

A wide-angle photograph of the Artemis I rocket on the Mobile Launcher Platform (MLP) being mated to the Mobile Launcher Vehicle (MLV) on the Mobile Launcher System (MLS) at the Vehicle Assembly Building (VAB). The MLP is a large, white, rectangular structure that houses the rocket. The MLV is a large, white, cylindrical structure that carries the MLP. The MLS is a large, white, cylindrical structure that carries the MLV. The rocket is orange and white. The scene is set against a blue sky with white clouds. In the foreground, there is a green field with some tall grass. In the background, there are several tall, white, lattice towers. The overall scene is a busy launch complex.

SPACE LAUNCH SYSTEM

1

00:00:00,720 --> 00:00:04,920

The Space Launch System is really the backbone of the Artemis missions. It's the

2

00:00:04,920 --> 00:00:10,740

truck. It's the big carry vehicle. It allows us to carry both crew,

3

00:00:10,740 --> 00:00:15,180

as well as the equipment that we need to live and work on the Moon.

h

4

00:00:16,620 --> 00:00:21,480

Sixty years ago, NASA was in a race to get to the Moon. This time is more than

5

00:00:21,480 --> 00:00:24,420

just a race. It's about establishing a long-term presence on the Moon.

h

6

00:00:24,420 --> 00:00:29,820

Can you imagine rolling the Statue of Liberty out to put at the pad? That's what we're doing.

h

7

00:00:31,320 --> 00:00:35,880

It will lift-up from Earth with more power than the Saturn V, which was the first

8

00:00:35,880 --> 00:00:40,380

vehicle to take us to the Moon. Artemis is our next giant leap.

h

9

00:00:48,180 --> 00:00:53,280

The difference between the Apollo program and the Artemis program is really the focus

10

00:00:53,280 --> 00:00:57,600

on sustainability, and using the Moon  
as an outpost for further exploration.  
\h

11

00:00:57,600 --> 00:01:03,720

This time we're going back to learn  
how to live and work on the Moon.  
\h

12

00:01:03,720 --> 00:01:11,940

The Space Launch System really is a culmination of  
our knowledge for 60 years of building rockets.  
\h

13

00:01:11,940 --> 00:01:20,520

We started by looking at over 1700 different  
potential components that would go into the

14

00:01:20,520 --> 00:01:25,920

rocket, and by looking at the way we  
could reuse some of the most reliable

15

00:01:25,920 --> 00:01:30,840

equipment that was flown on the shuttle.  
We took those and we put them together into

16

00:01:30,840 --> 00:01:37,560

a system that had enough energy to make sense to  
do the mission that we've been asked to do to.  
\h

17

00:01:37,560 --> 00:01:43,560

We're moving from low-Earth orbit, like you  
see in the International Space Station today,

18

00:01:43,560 --> 00:01:47,340

to moving beyond that to taking  
the next step in exploration.  
\h

19

00:01:48,840 --> 00:01:56,700

It's 322 feet tall. It's got 700,000 gallons of  
cryogenic propellant in the core stage alone.

20

00:01:57,300 --> 00:02:01,440

It can produce 8.8 million  
pounds of vacuum thrust.

21

00:02:01,440 --> 00:02:06,660

The Space Launch System is really a  
national rocket, a national asset, too.

22

00:02:06,660 --> 00:02:11,100

We have worked with contractors  
as well as with our NASA experts,

23

00:02:11,100 --> 00:02:15,240

our science and engineering department,  
our safety and mission assurance team.

24

00:02:15,240 --> 00:02:19,560

To get the Space Launch System  
designed, developed and produced,

25

00:02:19,560 --> 00:02:22,680

it has taken thousands of  
companies across the country.

26

00:02:22,680 --> 00:02:29,400

It comes together by train. It comes together  
by plane. It comes together by barges.

27

00:02:29,400 --> 00:02:34,140

All of that culminates at the Kennedy Space Center  
for the launch of the first Artemis mission.

28  
00:02:34,140 --> 00:02:38,640  
Everybody has worked together to make sure we have a safe and reliable rocket.

29  
00:02:39,480 --> 00:02:46,860  
At NASA, safety and testing is extremely important because ultimately this rocket isn't meant just to

30  
00:02:46,860 --> 00:02:52,620  
carry cargo, it's meant to carry people. It takes all types of education, all types of

31  
00:02:52,620 --> 00:02:57,240  
backgrounds, all types of diversity to do the things we do, and it'll be great

32  
00:02:57,240 --> 00:03:03,120  
to see a diverse crew land on the moon. Where the Space Launch System comes in is

33  
00:03:03,120 --> 00:03:08,400  
providing that reliable transportation, so that we can start flying these rockets on a routine

34  
00:03:08,400 --> 00:03:15,300  
basis to take people and to take payload to that outpost, the Moon and also the Gateway system.

35  
00:03:15,300 --> 00:03:20,700  
We have a generation who have never seen deep space exploration, and this will give them an

36  
00:03:20,700 --> 00:03:24,660  
opportunity to see that this is something that they can potentially do themselves.

37  
00:03:24,660 --> 00:03:27,240

It's going to be a paradigm shift for NASA. We're h