



1  
00:00:00,179 --> 00:00:02,390  
A key milestone for our lunar Gateway ...

2  
00:00:02,390 --> 00:00:06,720  
“Rolling out” for a critical Orion safety  
test ...

3  
00:00:06,720 --> 00:00:13,200  
And a chance to send your name to Mars ... a  
few of the stories to tell you about – This

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00:00:13,200 --> 00:00:16,110  
Week at NASA!

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00:00:16,110 --> 00:00:20,930  
In one of the first steps of our Artemis lunar  
exploration plans, we have selected Maxar

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00:00:20,930 --> 00:00:26,630  
Technologies to provide the power and propulsion  
element for our lunar Gateway.

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00:00:26,630 --> 00:00:32,410  
The power and propulsion element is a spacecraft  
that will use high-power solar electric propulsion

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00:00:32,410 --> 00:00:37,620  
to give our explorers aboard the Gateway access  
to the entire surface of the Moon.

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00:00:37,620 --> 00:00:42,399  
It will also enable the Gateway to serve as  
a mobile command and service module by providing

10  
00:00:42,399 --> 00:00:47,460  
a communications relay for human and robotic  
expeditions to the lunar surface.

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00:00:47,460 --> 00:00:54,530

“This is a critical capability for not just a sustainable lunar return, but also an eventual

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00:00:54,530 --> 00:00:55,790

journey to Mars.”

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00:00:55,790 --> 00:01:01,720

NASA’s current lunar exploration plans call for a return to the Moon within five years,

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00:01:01,720 --> 00:01:06,280

and a sustained human presence on and around the Moon by 2028.

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00:01:06,280 --> 00:01:12,810

The agency is targeting launch of the power and propulsion element in late 2022.

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00:01:12,810 --> 00:01:18,430

The vehicle for our Orion spacecraft’s Ascent Abort-2 flight test was rolled out from Kennedy

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00:01:18,430 --> 00:01:24,080

Space Center to Cape Canaveral Air Force Station, in preparation for its launch this summer.

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00:01:24,080 --> 00:01:28,909

This will be a full-stress test of Orion’s Launch Abort System, which is designed to

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00:01:28,909 --> 00:01:33,770

propel the spacecraft and its crew safely away from the rocket, should a life-threatening

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00:01:33,770 --> 00:01:36,570

event happen during an actual launch.

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00:01:36,570 --> 00:01:41,650

This critical safety test will help pave the way for Artemis missions near the Moon and

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00:01:41,650 --> 00:01:47,729

enable astronauts to set foot on the lunar surface by 2024.

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00:01:47,729 --> 00:01:51,950

Through September 30, we are giving you an opportunity to send your name to Mars aboard

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00:01:51,950 --> 00:01:58,390

our Mars 2020 rover – currently targeted for launch as early as July 2020.

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00:01:58,390 --> 00:02:03,159

Submitted names will be etched onto one or more dime-size microchips that will ride on

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00:02:03,159 --> 00:02:05,130

the rover under a glass cover.

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00:02:05,130 --> 00:02:09,619

Each microchip can hold more than a million names – and more than two million names

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00:02:09,619 --> 00:02:12,470

were submitted in the first three days.

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00:02:12,470 --> 00:02:17,760

Mars 2020 will collect samples for future return to Earth, and pave the way for human

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00:02:17,760 --> 00:02:19,769

exploration of the Red Planet.

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00:02:19,769 --> 00:02:29,219

To add your name to the list and obtain a souvenir boarding pass, go to [go.nasa.gov/Mars2020Pass](http://go.nasa.gov/Mars2020Pass).

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00:02:29,219 --> 00:02:34,510

The final and most complex season of flight tests is underway for our Unmanned Aircraft

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00:02:34,510 --> 00:02:38,209  
Systems Traffic Management project, or UTM.

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00:02:38,209 --> 00:02:43,250  
This round of testing tackles the unique challenges of flying small drones in the urban landscape

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00:02:43,250 --> 00:02:49,249  
– with flights through August 2019 in Reno, Nevada and Corpus Christi, Texas.

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00:02:49,249 --> 00:02:54,299  
Since 2015, NASA has researched the ins and outs of building a system to manage drone

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00:02:54,299 --> 00:02:55,920  
traffic safely.

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00:02:55,920 --> 00:03:00,829  
The project works with the Federal Aviation Administration and other partners to understand

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00:03:00,829 --> 00:03:06,889  
how a nationwide system for drone traffic could be created from scratch.

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00:03:06,889 --> 00:03:12,159  
Our Green Propellant Infusion Mission, or GPIM, is a small spacecraft the size of a

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00:03:12,159 --> 00:03:18,150  
mini-refrigerator that will test a low toxicity propellant and compatible systems in space

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00:03:18,150 --> 00:03:19,900  
for the first time.

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00:03:19,900 --> 00:03:24,290

This cutting-edge “green” technology could improve the performance of future missions

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00:03:24,290 --> 00:03:29,120

by providing for longer mission durations using less propellant.

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00:03:29,120 --> 00:03:36,030

GPIM is one of four unique NASA technology missions targeted for launch in June 2019,

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00:03:36,030 --> 00:03:39,459

aboard a SpaceX launch of a U.S. Air Force project.

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00:03:39,459 --> 00:03:43,279

That's what's up this week @NASA ...