



1  
00:00:00,669 --> 00:00:06,650

“Here’s some of our top stories of 2017,  
so far – Mid-Year at NASA!”

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00:00:06,650 --> 00:00:07,650

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3  
00:00:07,650 --> 00:00:11,889

In January we announced two new missions to  
previously unexplored asteroids.

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00:00:11,889 --> 00:00:18,480

The Lucy mission in 2021 will study so-called  
Trojan asteroids trapped by Jupiter’s gravity,

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00:00:18,480 --> 00:00:24,920

and the Psyche mission in 2023 will investigate  
a very large metal object in the solar system’s

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00:00:24,920 --> 00:00:25,930

asteroid belt.

7  
00:00:25,930 --> 00:00:30,070

Both missions can teach us more about the  
earliest eras of our solar system.

8  
00:00:30,070 --> 00:00:31,470

The Most Earth-Size, Habitable-Zone Planets  
around a Single Star (2-24-17 TW@N)

9  
00:00:31,470 --> 00:00:32,470

(VO)[Super: February]

10  
00:00:32,470 --> 00:00:37,589

In February we announced our Spitzer Space  
Telescope has found seven Earth-sized planets

11  
00:00:37,589 --> 00:00:42,219

in the TRAPPIST-1 system – about 235 trillion

miles away.

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00:00:42,219 --> 00:00:45,989

Three of the planets are in that system's habitable zone – which means liquid water

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00:00:45,989 --> 00:00:46,989

is possible.

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00:00:46,989 --> 00:00:52,069

It's the most planets ever found in a single star's habitable zone, and the best target

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00:00:52,069 --> 00:00:57,589

yet to study potentially habitable Earth-sized worlds.

16

00:00:57,589 --> 00:01:02,260

We highlighted the transition of Kennedy Space Center to a multi-user spaceport with the

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00:01:02,260 --> 00:01:07,390

February launch of a SpaceX resupply mission to the International Space Station.

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00:01:07,390 --> 00:01:13,130

It was the first commercial launch from Kennedy, and the first from historic launch pad 39A

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00:01:13,130 --> 00:01:17,439

since the final space shuttle mission in 2011.

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00:01:17,439 --> 00:01:22,429

In March, President Trump signed the National Aeronautics and Space Administration Transition

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00:01:22,429 --> 00:01:25,320

Authorization Act of 2017.

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00:01:25,320 --> 00:01:30,210

The bipartisan legislation reaffirms Congress' commitment to the agency.

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00:01:30,210 --> 00:01:34,990

Our acting Administrator, Robert Lightfoot thanked the president and Congress for their

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00:01:34,990 --> 00:01:37,110

support.

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00:01:37,110 --> 00:01:41,719

In April, the President called the International Space Station to congratulate Peggy Whitson

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00:01:41,719 --> 00:01:50,430

on her 535th day in space -- a new record for cumulative time in space by a U.S. astronaut.

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00:01:50,430 --> 00:01:55,409

We announced our Cassini mission found a key ingredient for life in the ocean on Saturn's

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00:01:55,409 --> 00:02:00,310

moon Enceladus, and that our Hubble Space Telescope might have spotted a vapor plume

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00:02:00,310 --> 00:02:06,999

on Jupiter's moon Europa in the same location a plume was seen in 2014 – possible evidence

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00:02:06,999 --> 00:02:10,899

of subsurface water on the icy moon.

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00:02:10,899 --> 00:02:16,370

Cassini also made its first dive through the narrow gap between Saturn and its rings – returning

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00:02:16,370 --> 00:02:19,970

the first ever images from that previously

unexplored region.

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00:02:19,970 --> 00:02:24,210

Cassini is making 22 dives as part of it's Grand Finale.

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00:02:24,210 --> 00:02:31,420

The mission will conclude with a science-rich plunge into Saturn's atmosphere on Sept. 15.

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00:02:31,420 --> 00:02:37,640

In May, the first science results from our Juno spacecraft revealed that Jupiter has

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00:02:37,640 --> 00:02:44,299

Earth-sized polar cyclones, a magnetic field that is stronger than expected, and plunging

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00:02:44,299 --> 00:02:50,940

storm systems that reach down much deeper into the planet's atmosphere than expected.

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00:02:50,940 --> 00:02:54,709

A milestone spacewalk aboard the International Space Station.

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00:02:54,709 --> 00:02:59,680

Peggy Whitson and Jack Fischer completed the 200th spacewalk in support of station assembly

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00:02:59,680 --> 00:03:01,050

and maintenance.

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00:03:01,050 --> 00:03:06,489

Just over a week later, Whitson moved into third place on the all-time list for cumulative

42

00:03:06,489 --> 00:03:12,170

spacewalking time following the station's 201st spacewalk.

43  
00:03:12,170 --> 00:03:17,400  
Our James Webb Space Telescope was shipped to Johnson Space Center for cryogenic testing

44  
00:03:17,400 --> 00:03:23,140  
in Johnson's Chamber A – the same “deep-freeze” vacuum chamber where Apollo lunar spacecraft

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00:03:23,140 --> 00:03:24,500  
were tested.

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00:03:24,500 --> 00:03:28,420  
This is Webb's last critical test before launch in 2018.

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00:03:28,420 --> 00:03:31,540  
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In early June, Solar Probe Plus – the first

48  
00:03:31,540 --> 00:03:36,940  
mission designed to fly directly into the sun's atmosphere – was renamed the Parker

49  
00:03:36,940 --> 00:03:42,469  
Solar Probe, in honor of University of Chicago physicist, Eugene Parker.

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00:03:42,469 --> 00:03:46,500  
Parker is best known for developing the concept of solar wind.

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00:03:46,500 --> 00:03:52,209  
The mission launches in 2018 to study the physics of stars.

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00:03:52,209 --> 00:03:57,280  
And Vice President Mike Pence helped announce America's newest class of astronaut candidates

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00:03:57,280 --> 00:03:58,830

at Johnson Space Center.

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00:03:58,830 --> 00:04:04,270

Out of more than 18,000 applicants, 12 men and women were selected.

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00:04:04,270 --> 00:04:09,469

Making the 2017 astronaut class -- the largest selected since 2000.

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00:04:09,469 --> 00:04:15,010

Future astronauts will launch on American-made commercial spacecraft and carry out exploration

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00:04:15,010 --> 00:04:20,460

missions that will take humans farther into space than ever before.

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00:04:20,460 --> 00:04:26,160

And those are some of our top stories of 2017, so far – Mid-Year at NASA!"