



1
00:00:00,969 --> 00:00:05,090

“Here’s some of the stories trending This Week at NASA!”

2
00:00:05,090 --> 00:00:10,040

The four spacecraft orbiting Earth in formation as part of NASA’s Magnetospheric Multiscale,

3
00:00:10,040 --> 00:00:15,190

or MMS, mission achieved a new record recently when the space between them was decreased

4
00:00:15,190 --> 00:00:18,970

from just over six miles to only four-and-a-half miles.

5
00:00:18,970 --> 00:00:23,820

This is the closest separation ever of any multi-spacecraft formation.

6
00:00:23,820 --> 00:00:29,360

The team of spacecraft fly in a pyramid shape, called a tetrahedron, which enables MMS to

7
00:00:29,360 --> 00:00:34,480

capture three-dimensional observations of magnetic reconnection – a mysterious phenomenon,

8
00:00:34,480 --> 00:00:38,750

during which magnetic fields experience explosive interactions.

9
00:00:38,750 --> 00:00:43,820

The closer formation will allow the spacecraft to measure magnetic reconnection at smaller

10
00:00:43,820 --> 00:00:48,530

scales, helping scientists to better understand it.

11
00:00:48,530 --> 00:00:52,970
While it will be years before the first astronauts go to Mars, a new exhibit at the Kennedy Space

12
00:00:52,970 --> 00:00:58,080
Center Visitor Complex in Florida can take you on a virtual field trip there, now.

13
00:00:58,080 --> 00:01:04,610
Apollo 11 astronaut Buzz Aldrin helped introduce "Destination Mars", a mixed-reality experience

14
00:01:04,610 --> 00:01:10,630
designed by NASA's Jet Propulsion Laboratory, and Microsoft HoloLens – a fully self-contained,

15
00:01:10,630 --> 00:01:12,630
holographic computer.

16
00:01:12,630 --> 00:01:18,030
The limited-time exhibit, which uses real imagery taken by NASA's Mars Curiosity rover

17
00:01:18,030 --> 00:01:25,630
and enables users to explore the Martian surface, runs through Jan. 1, 2017.

18
00:01:25,630 --> 00:01:31,370
Orbital ATK is targeting a five-day window of Oct. 9-13, for the launch of its Antares

19
00:01:31,370 --> 00:01:36,060
rocket and Cygnus cargo spacecraft to the International Space Station, from Wallops

20
00:01:36,060 --> 00:01:37,460
Flight Facility, in Virginia.

21
00:01:37,460 --> 00:01:43,090

A more specific date will be identified upon completion of final operational milestones

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00:01:43,090 --> 00:01:45,100
and technical reviews.

23

00:01:45,100 --> 00:01:50,690
This mission, known as OA-5, will be Orbital ATK's sixth to the station under its Commercial

24

00:01:50,690 --> 00:01:53,590
Resupply Services (CRS) contract with NASA.

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00:01:53,590 --> 00:01:58,160
Cygnus will carry more than 5,200 pounds of supplies and science experiments to the space

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00:01:58,160 --> 00:01:59,670
station on the mission.

27

00:01:59,670 --> 00:02:01,260
"Two, recover.

28

00:02:04,440 --> 00:02:02,850
Two recover.

29

00:02:04,440 --> 00:02:06,030
(warning alarm)."

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00:02:06,030 --> 00:02:11,190
This video from the heads-up display of an F-16 aircraft during a recent training exercise

31

00:02:11,190 --> 00:02:16,100
shows the jet plummeting toward the ground after its student-pilot loses consciousness.

32

00:02:16,100 --> 00:02:21,620
But, fortunately, technology known as the

Automatic Ground Collision Avoidance System,

33
00:02:21,620 --> 00:02:27,890
or Auto-GCAS, developed in part by NASA, took control and maneuvered the F-16 and the pilot

34
00:02:27,890 --> 00:02:29,790
away from the ground, to safety.

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00:02:29,790 --> 00:02:35,069
NASA's Armstrong Flight Research Center, the Air Force Research Lab, and Lockheed Martin

36
00:02:35,069 --> 00:02:39,130
collaborated on testing and development of this technology.

37
00:02:39,130 --> 00:02:44,610
This is the fourth confirmed save of an aircraft by Auto-GCAS.

38
00:02:44,610 --> 00:02:50,130
NASA Administrator Charlie Bolden was on hand at headquarters for the 2016 Combined Federal

39
00:02:50,130 --> 00:02:53,630
Campaign Kickoff event on Sept. 22.

40
00:02:53,630 --> 00:02:59,020
Each year, donations from NASA employees make a positive impact on the lives of others who

41
00:02:59,020 --> 00:03:00,020
are less fortunate.

42
00:03:00,020 --> 00:03:05,560
There is a wide choice of approved local, national and international charities to which

43

00:03:05,560 --> 00:03:08,220

employees around the agency can donate.

44

00:03:08,220 --> 00:03:12,390

The campaign runs through Dec. 31.

45

00:03:12,390 --> 00:03:14,300

And that's what's up this week @NASA ...