
NASA
nasa.gov/MAVEN

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00:00:00,010 --> 00:00:04,010
>>INTERVIEWER: Last November, NASA launched a new mission to investigate the mystery of how

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00:00:04,030 --> 00:00:08,040
it became the red planet, and how it may have looked in the past. Now that

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00:00:08,060 --> 00:00:12,050
mission is about to arrive, and here joining us from NASA's Goddard Space Flight Center

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00:00:12,070 --> 00:00:16,080
in Greenbelt, Maryland is MAVEN Deputy Program Scientist Dr.

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00:00:16,100 --> 00:00:20,120
Kelly Fast. Thank you for joining us. >>KELLY: Thank you. >>INTERVIEWER: After nearly

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00:00:20,140 --> 00:00:24,130
a year-long journey, MAVEN is finally arriving at Mars. Tell us about the

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00:00:24,150 --> 00:00:28,160
MAVEN mission entering Mars' atmosphere. >>KELLY: Well we're really excited because

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00:00:28,180 --> 00:00:32,250
coming up here on Sunday, after launching last November,

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00:00:32,270 --> 00:00:36,260
and a 10-month journey to Mars, MAVEN will finally be arriving

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00:00:36,280 --> 00:00:40,290
at Mars coming up here on Sunday. We've got a really critical operation

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00:00:40,310 --> 00:00:44,330
for MAVEN will be orienting itself and firing its rockets so that it can be

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00:00:44,350 --> 00:00:48,350
captured into orbit around Mars. And after that white-knuckle

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00:00:48,370 --> 00:00:52,360

period of time, MAVEN will settle into science

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00:00:52,380 --> 00:00:56,400
operations and it will start studying the upper atmosphere of Mars.

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00:00:56,420 --> 00:01:00,410
>>INTERVIEWER: What will MAVEN do as it orbits Mars?

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00:01:00,430 --> 00:01:04,410
>>KELLY: Well MAVEN is the first mission that is designed to study Mars'

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00:01:04,430 --> 00:01:08,430
upper atmosphere. And so MAVEN will deploy its instruments,

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00:01:08,450 --> 00:01:12,450
that are uniquely designed for this mission, and it will make measurements

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00:01:12,470 --> 00:01:16,460
of processes taking place in the upper atmosphere and its interaction with the Sun,

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00:01:16,480 --> 00:01:20,560
things that lead to escape of the atmosphere, to try

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to determine what happened to Mars over time. Mars once

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was, appeared to be a warmer and wetter place with a thicker atmosphere,

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00:01:28,620 --> 00:01:32,640
and it's not the case now. So MAVEN is going to try to answer some of those questions.

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00:01:32,660 --> 00:01:36,650
>>INTERVIEWER: What else is NASA doing to try to better understand Mars, and what are our plans for

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the future? >>KELLY: Well, NASA has a vibrant program. We have the

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2016 launch of the InSight mission, which will

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00:01:44,770 --> 00:01:48,790
land on Mars to study the interior. We have the 2020 rover which will be

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00:01:48,810 --> 00:01:52,860
launched and rove Mars and make further measurements.

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00:01:52,880 --> 00:01:56,920
And, MAVEN is part of that whole program of current missions

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00:01:56,940 --> 00:02:00,940
and future missions that will try to characterize Mars from

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00:02:00,960 --> 00:02:04,960
the surface out to space as part of that Journey to Mars

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to one day send future missions and humans to Mars

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00:02:09,030 --> 00:02:13,030
one day. >>INTERVIEWER: How does studying the red planet's evolution help us

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00:02:13,050 --> 00:02:17,070
understand the formation of other planets, including Earth? >>KELLY: Well certainly

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00:02:17,090 --> 00:02:21,120
we look at Mars, and from all the evidence from all the other missions

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that have gone to Mars, that all these signs that Mars was a warmer

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00:02:25,160 --> 00:02:29,230
and wetter place with a thicker atmosphere, and so if you had a planet that

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00:02:29,250 --> 00:02:33,240

once perhaps looked more Earth-like, you want to answer those

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questions about what did happen to the planet. And so MAVEN will be looking at

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00:02:37,280 --> 00:02:41,300
those processes in the upper atmosphere that take place that lead to escape

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00:02:41,320 --> 00:02:45,320
of the atmosphere, to try to track that back through time to figure happened to Mars.

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00:02:45,340 --> 00:02:49,340
>>INTERVIEWER: Sounds good, where can we learn more? >>KELLY: Well you can

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00:02:49,360 --> 00:02:53,390
go to NASA.gov/MAVEN and you can find out

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00:02:53,410 --> 00:02:57,390
lots of information about the MAVEN mission, animations, and

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00:02:57,410 --> 00:03:01,430
images and such, but also links to social media so that you can go

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00:03:01,450 --> 00:03:05,470
into orbit at Mars with us and you can find out more about the mission

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00:03:05,490 --> 00:03:09,470
as the mission takes place. So come join us. >>INTERVIEWER: Dr. Kelly

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00:03:09,490 --> 00:03:13,510
Fast, thank you for joining us. >>KELLY: Thank you.