1
00:00:00,700 --> 00:00:07,020
NARRATOR: Welcome to Kennedy Now!, a monthly look at some of the work taking place at America's

2
00:00:07,020 --> 00:00:10,549
premiere spaceport.

3
00:00:10,549 --> 00:00:16,020
Kennedy focused anew on Mars exploration in August with the arrival of MAVEN, a spacecraft

4
00:00:16,020 --> 00:00:20,880
designed to orbit Earth's nearest planetary neighbor and sample the upper atmosphere of

5
00:00:20,880 --> 00:00:23,440
the intriguing Red Planet.

6
00:00:23,440 --> 00:00:28,660
Powered by two solar array wings, MAVEN will use its sensors to detect signs of the ancient

7
00:00:28,660 --> 00:00:33,720
Martian atmosphere and tell researchers what happened to the planet that left it such a

8
00:00:33,720 --> 00:00:35,830
dry, barren place.

9
00:00:35,830 --> 00:00:40,440
Scientists want to know where the liquid water that flowed on the surface went, as well as

10
00:00:40,440 --> 00:00:43,750
some of the volatile elements in the atmosphere such as nitrogen.

11
00:00:43,750 --> 00:00:48,220
It will take several months to prep MAVEN

for the demanding mission which calls for

12
00:00:48,220 --> 00:00:53,750
the spacecraft to fly through deep space for
10 months before reaching Mars and going into

13
00:00:53,750 --> 00:00:54,750
orbit.

14
00:00:54,750 --> 00:00:59,720
A United Launch Alliance Atlas V rocket and
its Centaur upper stage that will loft the

15
00:00:59,720 --> 00:01:04,729
spacecraft also arrived at the launch site
in August and began its own processing for

16
00:01:04,729 --> 00:01:05,909
the mission.

17
00:01:05,909 --> 00:01:10,600
NASA's Launch Services Program will oversee
the liftoff from Cape Canaveral Air Force

18
00:01:10,600 --> 00:01:14,999
Station, which is targeted for November.

19
00:01:14,999 --> 00:01:20,380
While one Kennedy program focused on the beginning
of a mission, another, NASA's Ground System

20
00:01:20,380 --> 00:01:25,609
Development and Operations Program, ran through
some of the precision techniques it will employ

21
00:01:25,609 --> 00:01:28,090
at the end of an upcoming mission.

22
00:01:28,090 --> 00:01:33,149

Navy divers working from the USS Arlington,
a well deck ship docked at the Norfolk Naval

23
00:01:33,149 --> 00:01:38,509
Base in Virginia, rehearsed the recovery of
an Orion spacecraft from the water using the

24
00:01:38,509 --> 00:01:41,469
same routine they will use following a mission.

25
00:01:41,469 --> 00:01:45,869
The recovery will look significantly different
from earlier eras when capsules were lifted

26
00:01:45,869 --> 00:01:49,459
by crane far above the seas and placed on
a deck.

27
00:01:49,459 --> 00:01:53,869
Instead, the well deck ship with its unique
covered area that can be flooded and dried

28
00:01:53,869 --> 00:01:59,009
on command, will allow the Orion to be towed
into place and the water drained from around

29
00:01:59,009 --> 00:02:00,009
it.

30
00:02:00,009 --> 00:02:04,720
That means astronauts returning from long
missions into deep space will not be jostled

31
00:02:04,720 --> 00:02:10,000
much, allowing them to adapt progressively
to their return to gravity.

32
00:02:10,000 --> 00:02:14,410
On the other side of the country, another
new spacecraft under development moved through

33
00:02:14,410 --> 00:02:16,599
an ambitious testing cycle.

34
00:02:16,599 --> 00:02:21,459
Working closely with NASA's Commercial Crew
Program, based at Kennedy, the Sierra Nevada

35
00:02:21,459 --> 00:02:27,630
Corporation lifted the Dream Chaser into the
sky above Edwards Air Force Base in California.

36
00:02:27,630 --> 00:02:31,780
The spacecraft was put through a tethered
rehearsal of the gliding and landing test

37
00:02:31,780 --> 00:02:35,950
flights it will make this fall as the company
proves its design.

38
00:02:35,950 --> 00:02:41,209
Called a "captive-carry test," the flight
was a vital step in a series of evaluations