1
00:00:12,500 --> 00:00:16,900
NARRATOR: America's next generation of human-rated
spacecraft is being designed to be flown from

2
00:00:16,900 --> 00:00:22,810
launch through landing... by computers!. Complex
maneuvers including rendezvous and docking

3
00:00:22,810 --> 00:00:28,119
will be automated and precise to a level not capable with earlier machines.

4
00:00:28,119 --> 00:00:32,029
But that doesn't mean the spacecraft won't
need a pilot to take control should there

5
00:00:32,029 --> 00:00:32,770
be a problem.

6
00:00:32,770 --> 00:00:37,600
CHRIS FERGUSON: It's designed to be largely autonomous but the pilot will always be there to

7
00:00:37,600 --> 00:00:40,949
back up the autonomy in the event something unexpected happens.

8
00:00:40,949 --> 00:00:46,410
So we always have the ability to take over
from the vehicle and execute something whether

9
00:00:46,410 --> 00:00:48,449
it be a docking or a re-entry.

10
00:00:48,449 --> 00:00:52,600
NARRATOR: Boeing Space Exploration, one of
several companies working with

11
00:00:52,600 --> 00:00:57,780
NASA's Commercial Crew Program to develop
a new American spacecraft capable of carrying

12
00:00:57,780 --> 00:01:02,550
people to low-Earth orbit, recently showed that a pilot safely can assume control

13
00:01:02,550 --> 00:01:07,520
of the CST-100 in almost any circumstance.

14
00:01:07,520 --> 00:01:10,370
Working in a simulator at the company's Houston
office,

15
00:01:10,370 --> 00:01:16,210
Ferguson, a former NASA space shuttle commander,
demonstrated what flying the CST-100

16
00:01:16,210 --> 00:01:20,370
will look like with a person sitting in for
the computers at the controls.

17
00:01:20,370 --> 00:01:23,520
FERGUSON: This is the first opportunity that
we have that we can show we have a vehicle

18
00:01:23,520 --> 00:01:27,000
that can fly. We've used actual flight software,

19
00:01:27,000 --> 00:01:29,700
we've used our model displays and our

20
00:01:29,700 --> 00:01:31,390
real jet models to show that we

21
00:01:31,390 --> 00:01:36,830
have a vehicle that can stay under control,
can dock with the International Space Station

22
00:01:36,830 --> 00:01:37,850
and fly a re-entry.

23

00:01:37,850 --> 00:01:43,350
NARRATOR: The test's significant accomplishments underscored two years' worth of work by

24
00:01:43,350 --> 00:01:45,690
the simulator and flight software development team.

25
00:01:45,690 --> 00:01:49,220
Lynna WOOD: It's very exciting for us, it's a very exciting day.

26
00:01:49,220 --> 00:01:54,170
It's been a long journey where we've learned a lot. A lot of lessons learned, a lot of

27
00:01:54,170 --> 00:01:55,360
exciting progress was

28
00:01:55,360 --> 00:01:59,330
made. We did start this about a year ago when we started writing the requirements for our

29
00:01:59,330 --> 00:01:59,980
partner who

30
00:01:59,980 --> 00:02:04,170
built the simulator as well as starting to put the pieces together, see the switches

31
00:02:04,170 --> 00:02:10,619
go in, the displays together. The team has just done a fantastic job pulling this together.

32
00:02:10,619 --> 00:02:15,670
NARRATOR: The demonstration a milestone under Boeing's Commercial Crew Integrated Capabilities

33
00:02:15,670 --> 00:02:17,220
agreement with NASA.

34
00:02:17,220 --> 00:02:21,990
The simulator will next see increasingly demanding conditions as it's connected with

35
00:02:21,990 --> 00:02:27,380
NASA's Mission Control Center at nearby Johnson Space Center for mission simulations that

36
00:02:27,380 --> 00:02:31,020
include flight controllers and malfunction conditions.

37
00:02:31,020 --> 00:02:37,140
The CST-100 design will undergo a series of reviews this spring that will take the plans

38
00:02:37,140 --> 00:02:37,810
for the capsule-