1
00:00:18,140 --> 00:00:20,300
\h Tom Simon/NASA's Commercial Crew Program: The Commercial Crew Program is really approaching

2
00:00:20,300 --> 00:00:23,810
\h human spaceflight in a brand new way. For years and decades,

3
00:00:23,810 --> 00:00:30,260
\h we've been approaching it as a government-managed, government-owned processes to

4
00:00:30,260 --> 00:00:34,490
\h set up systems to meet the government's needs.

5
00:00:34,490 --> 00:00:37,530
\h Now we're working with industry to help industry to be able to develop their own

6
00:00:37,530 --> 00:00:42,110
\h systems to meet our needs and the needs of other users of those systems.

7
00:00:42,110 --> 00:00:44,360
\h So, this means that we'll be able to get our people to space,

8
00:00:44,360 --> 00:00:53,660
\h but also other people will be able to get to space on those same systems.

9
00:00:53,660 --> 00:00:56,420
\h Tom Simon/NASA's Commercial Crew Program: For the last few years, NASA has been investing

10
00:00:56,420 --> 00:01:03,390
\h in industry to develop the capabilities for companies to be able to, with their own systems,

11
00:01:03,390 --> 00:01:05,370
\h take people to low-Earth orbit.

12
00:01:05,370 --> 00:01:08,730
\h And now we're beginning a phase where we're looking to reap the benefits from that

13
00:01:08,730 --> 00:01:19,620

\h investment and be able to take our astronauts to the International Space Station.

14
00:01:19,620 --> 00:01:20,860
\h Tom Simon/NASA's Commercial Crew Program: There's a lot of exciting research

15
00:01:20,860 --> 00:01:23,440
\h being done on the International Space Station.

16
00:01:23,440 --> 00:01:25,010
\h I like to think about it as two different groups.

17
00:01:25,010 --> 00:01:30,290
\h The first group of being looking in a microgravity environment at the kind of things

18
00:01:30,290 --> 00:01:36,140
\h happen with you mix different chemicals or you look at different materials form and crystals,

19
00:01:36,140 --> 00:01:40,570
\h to help us really understand the fundamental science behind a lot of the things that

20
00:01:40,570 --> 00:01:44,490
\h we use every day and the things that we use to build the things that we need.

21
00:01:44,490 --> 00:01:47,460
\h And by that fundamental science, it will help us to make new medicines,

22
00:01:47,460 --> 00:01:50,630
\h be able to make materials to make lighter products or

23
00:01:50,630 --> 00:01:54,910
\h stronger things that we can use in airplanes, cell phones, anything.

24
00:01:54,910 --> 00:01:58,920
\h And the other group of the things that we're doing on the space station is

25
00:01:58,920 --> 00:02:02,660
\h getting ready to explore beyond low-Earth orbit.

26
00:02:02,660 --> 00:02:07,770
\h It is studying the effects of microgravity on our astronauts and also trying out new technologies

27
00:02:07,770 --> 00:02:19,980
\h that we can use for years in space before we venture all the way to Mars or something like that.

28
00:02:19,980 --> 00:02:23,540
\h Tom Simon/NASA's Commercial Crew Program: Going to space is not like walking down to the park.

29
00:02:23,540 --> 00:02:28,660
\h It's a dangerous endeavor, but with brave astronauts and working with the companies'

30
00:02:28,660 --> 00:02:33,430
\h innovative solutions that are making the systems good enough to meet our needs

31
00:02:33,430 --> 00:02:40,050
\h that are not pushing the envelope in either reducing safety or making things so

32
00:02:40,050 --> 00:02:45,090
\h fancy we can't afford it anymore, so the balance we're striking

33
00:02:45,090 --> 00:02:55,440
\h now gives us a lot of confidence that we'll be able to make this work.

34
00:02:55,440 --> 00:02:58,310
\h Tom Simon/NASA's Commercial Crew Program: I'm very confident we're going to be

35
00:02:58,310 --> 00:03:01,740
\h able to not only produce these systems to meet our needs, but they will be safe.

36
00:03:01,740 --> 00:03:09,360
\h We've worked to come up with our safety requirements to help set what it is that we need in terms of sa

37
00:03:09,360 --> 00:03:13,060
\h And we're allowing industry to address those needs in whatever way they can come up with

38
00:03:13,060 --> 00:03:25,200

\h unleashing American ingenuity to come up with the right ways to meet those safety requirements.

39
00:03:25,200 --> 00:03:28,010
\h Tom Simon/NASA's Commercial Crew Program: The Commercial Crew Program has the near-term

40
00:03:28,010 --> 00:03:33,580
\h benefit of helping to get our crews to and from the space station.

41
00:03:33,580 --> 00:03:38,670
\h But it fits into the overall big picture for NASA's exploration plan by allowing industry

42
00:03:38,670 --> 00:03:45,520
\h to take the lead on a lot of the getting cargo and crew to and from low-Earth orbit.

43
00:03:45,520 --> 00:03:50,980
\h It's going to allow NASA to push beyond low-Earth orbit and to accomplish exploration objectives,

44
00:03:50,980 --> 00:03:53,580
\h whether it's to the moon, to asteroids, Mars.

45
00:03:53,580 --> 00:03:58,230
\h With industry helping to shoulder the burden and take advantage of a