1
00:00:06,710 --> 00:00:03,669
with a loud roar and a mighty column of

2
00:00:09,509 --> 00:00:06,720
flame nasa and atk successfully

3
00:00:11,749 --> 00:00:09,519
completed a two-minute full-scale test

4
00:00:14,310 --> 00:00:11,759
of the largest and most powerful solid

5
00:00:17,189 --> 00:00:14,320
rocket motor designed for flight on

6
00:00:19,269 --> 00:00:17,199
august 31st the stationary firing of the

7
00:00:22,630 --> 00:00:19,279
five-segment solid motor known as the

8
00:00:25,830 --> 00:00:22,640
development motor 2 took place at atk's

9
00:00:27,910 --> 00:00:25,840
test facility in promontory utah and all

10
00:00:30,550 --> 00:00:27,920
test objectives were met

11
00:00:33,350 --> 00:00:30,560
prior to testing the motor was cooled to

12
00:00:35,670 --> 00:00:33,360
40 degrees fahrenheit for this to verify

13
00:00:38,069 --> 00:00:35,680

the performance of new materials

14
00:00:40,389 --> 00:00:38,079
after more testing the first stage solid

15
00:00:42,869 --> 00:00:40,399
rocket motor will be certified to fly at

16
00:00:44,630 --> 00:00:42,879
temperature ranges between 40 to 90

17
00:00:47,190 --> 00:00:44,640
degrees fahrenheit

18
00:00:49,830 --> 00:00:47,200
dm2 is the most heavily instrumented

19
00:00:52,470 --> 00:00:49,840
solid rocket motor in nasa history with

20
00:00:55,029 --> 00:00:52,480
53 test objectives measured through more

21
00:00:57,270 --> 00:00:55,039
than 760 instruments

22
00:00:59,590 --> 00:00:57,280
the motor was built as an element of

23
00:01:02,310 --> 00:00:59,600
nasa's constellation program and is

24
00:01:25,190 --> 00:01:02,320
potentially transferable to future heavy

25
00:01:25,200 --> 00:01:31,510
test

26
00:01:35,910 --> 00:01:33,670
t-minus 70 seconds

27
00:01:43,030 --> 00:01:35,920
commit the motor

28
00:01:45,910 --> 00:01:44,870
t-minus two minutes

29
00:01:46,950 --> 00:01:45,920
three

30
00:01:47,830 --> 00:01:46,960
two

31
00:02:29,270 --> 00:01:47,840
one

32
00:02:29,280 --> 00:03:58,149
so

33
00:04:03,030 --> 00:04:00,470
activate head and co2 but in co2 pin

34
00:04:05,110 --> 00:04:03,040
polar activated activate quench tool

35
00:04:14,949 --> 00:04:05,120
command forward and aft co2 quench

36
00:04:19,189 --> 00:04:16,469
there's nothing better for an engineer

37
00:04:21,030 --> 00:04:19,199
than to see an amazing test like this

38
00:04:24,150 --> 00:04:21,040

it's the culmination of a lot of good

39
00:04:26,310 --> 00:04:24,160
design work a lot of dedication

40
00:04:27,990 --> 00:04:26,320
by by an excellent team

41
00:04:30,150 --> 00:04:28,000
this is our second development test of

42
00:04:32,310 --> 00:04:30,160
the five segment uh

43
00:04:34,310 --> 00:04:32,320
motor

44
00:04:36,390 --> 00:04:34,320
we did get a chance here in the last

45
00:04:39,189 --> 00:04:36,400
hour to look at the preliminary data and

46
00:04:42,150 --> 00:04:39,199
it looks absolutely excellent

47
00:04:43,909 --> 00:04:42,160
my hat's off also to the atk nasa team

48
00:04:45,510 --> 00:04:43,919
that has pulled this off and put it

49
00:04:47,189 --> 00:04:45,520
together because

50
00:04:49,749 --> 00:04:47,199
they've leveraged a lot of great

51
00:04:51,110 --> 00:04:49,759
experience from the past they've

52
00:04:52,950 --> 00:04:51,120
maintained great discipline and

53
00:04:55,030 --> 00:04:52,960
engineering approaches made great

54
00:04:57,110 --> 00:04:55,040
decisions along the way and and the

55
00:04:59,030 --> 00:04:57,120
results that you see today don't come

56
00:05:00,390 --> 00:04:59,040
overnight it doesn't come from

57
00:05:02,070 --> 00:05:00,400
doing it the first time around so the

58
00:05:04,230 --> 00:05:02,080
critical skills in the workforce are