



1
00:00:04,849 --> 00:00:03,409
even for eons a US army test facility

2
00:00:06,800 --> 00:00:04,859
where we test everything from artillery

3
00:00:08,930 --> 00:00:06,810
to wheeled and tracked vehicles to

4
00:00:10,850 --> 00:00:08,940
aviation their delivery systems you

5
00:00:12,049 --> 00:00:10,860
improve ground is about the size it's a

6
00:00:14,720 --> 00:00:12,059
little larger than Rhode Island and

7
00:00:16,790 --> 00:00:14,730
about a third size of Massachusetts the

8
00:00:19,010 --> 00:00:16,800
US Army Proving Grounds has been part of

9
00:00:21,439 --> 00:00:19,020
the space program since the induction of

10
00:00:24,080 --> 00:00:21,449
the space program we see behind us is

11
00:00:26,480 --> 00:00:24,090
the waked up for the cluster drop test

12
00:00:28,400 --> 00:00:26,490
and which is testing the configuration

13
00:00:30,109 --> 00:00:28,410

of a 3 main parachute which will be the

14

00:00:32,359 --> 00:00:30,119

same configuration of the actual Ares

15

00:00:35,299 --> 00:00:32,369

rocket will be coming coming down when

16

00:00:38,299 --> 00:00:35,309

it separates on a lot we're very excited

17

00:00:39,770 --> 00:00:38,309

here at yuma proving grounds to help out

18

00:00:42,910 --> 00:00:39,780

with the space program and be part of

19

00:00:47,209 --> 00:00:42,920

that the Ares and constellation program

20

00:00:48,950 --> 00:00:47,219

the objective of today's test is to to

21

00:00:51,380 --> 00:00:48,960

get some basic performance

22

00:00:53,950 --> 00:00:51,390

characteristics of our Ares one main

23

00:00:57,410 --> 00:00:53,960

parachutes in a cluster configuration

24

00:00:59,900 --> 00:00:57,420

before we transported it to the plane we

25

00:01:01,610 --> 00:00:59,910

did a weight and balance on the on the

26
00:01:04,640 --> 00:01:01,620
load to ensure that we were within the

27
00:01:07,789 --> 00:01:04,650
the 42,000 pounds that we were planning

28
00:01:10,219 --> 00:01:07,799
on for the test and then also wanted to

29
00:01:12,560 --> 00:01:10,229
see where the center of gravity of the

30
00:01:15,230 --> 00:01:12,570
load was located for our for our test

31
00:01:17,450 --> 00:01:15,240
purposes we brought in a flatbed truck

32
00:01:20,270 --> 00:01:17,460
and we lifted up that pallet with the

33
00:01:22,850 --> 00:01:20,280
weighted tub and the cluster of

34
00:01:25,999 --> 00:01:22,860
parachutes on it and and transported it

35
00:01:28,940 --> 00:01:26,009
down here to the c-17 aircraft for that

36
00:01:32,830 --> 00:01:28,950
for the drop what what happens is we

37
00:01:35,810 --> 00:01:32,840
have a 15-foot tow parachute that's

38
00:01:38,030 --> 00:01:35,820

that's thrown out the back of the

39

00:01:42,710 --> 00:01:38,040

aircraft and when we get to the right

40

00:01:48,130 --> 00:01:42,720

location in on the drop zone that 15

41

00:01:51,830 --> 00:01:48,140

foot the tow parachute extracts 228 foot

42

00:01:56,660 --> 00:01:51,840

extraction parachutes that that then

43

00:01:59,980 --> 00:01:56,670

pulled the tub and pallet assembly out

44

00:02:02,590 --> 00:01:59,990

of the back of the aircraft the

45

00:02:07,780 --> 00:02:02,600

extraction parachutes are then release

46

00:02:11,820 --> 00:02:07,790

and they deploy a programmer parachute

47

00:02:14,380 --> 00:02:11,830

and then the the load falls under the

48

00:02:18,250 --> 00:02:14,390

programmer parachute for about 25

49

00:02:21,699 --> 00:02:18,260

seconds at that point the the programmer

50

00:02:25,420 --> 00:02:21,709

parachute is cut away and that enables

51
00:02:28,030 --> 00:02:25,430
the our main test article the cluster of

52
00:02:32,770 --> 00:02:28,040
three Ares one main parachutes to be

53
00:02:35,199 --> 00:02:32,780
deployed and then we go through a series

54
00:02:38,140 --> 00:02:35,209
of briefing stages on that cluster of

55
00:02:44,560 --> 00:02:38,150
main parachutes over a period of about

56
00:02:48,340 --> 00:02:44,570
90 seconds before the lands on the

57
00:02:50,890 --> 00:02:48,350
desert floor the recovery chutes for the

58
00:02:52,960 --> 00:02:50,900
Ares had to be redesigned because the

59
00:02:54,880 --> 00:02:52,970
Ares one first stage booster is much

60
00:02:58,090 --> 00:02:54,890
heavier and it returns at a much higher

61
00:03:00,310 --> 00:02:58,100
velocity than the shuttle SRBs therefore

62
00:03:03,280 --> 00:03:00,320
we needed much larger and much stronger

63
00:03:05,590 --> 00:03:03,290

parachutes although we did design these

64

00:03:08,140 --> 00:03:05,600

off the it was an evolutionary design

65

00:03:10,390 --> 00:03:08,150

off the heritage system of the the

66

00:03:12,400 --> 00:03:10,400

shuttles SRB this cluster test today

67

00:03:14,229 --> 00:03:12,410

finishes up our basic performance test

68

00:03:15,910 --> 00:03:14,239

where we're going next is we'll be

69

00:03:17,560 --> 00:03:15,920

taking each of the individual tests the

70

00:03:20,050 --> 00:03:17,570

pilot the drogue and the single mains

71

00:03:21,610 --> 00:03:20,060

and we'll be doing strength tests we'll

72

00:03:23,680 --> 00:03:21,620

be putting them on we'll be testing that

73

00:03:26,199 --> 00:03:23,690

design load and then over load test to

74

00:03:28,630 --> 00:03:26,209

qualify them to actually fly on the Ares

75

00:03:31,090 --> 00:03:28,640

one vehicle oh the the test was

76

00:03:33,880 --> 00:03:31,100

spectacular to see three 150 foot

77

00:03:35,949 --> 00:03:33,890

diameter parachutes fully inflated at

78

00:03:38,380 --> 00:03:35,959

one time dropping against the desert

79

00:03:40,360 --> 00:03:38,390

background was just awesome this is a

80

00:03:44,130 --> 00:03:40,370

big milestone for the development of our

81

00:03:47,380 --> 00:03:44,140

our Ares one the main parachutes in and