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LVSA Weld Lead

1
00:00:11,690 --> 00:00:09,110
the MBSA is also known as the launch

2
00:00:13,490 --> 00:00:11,700
vehicle stage adapter it's the piece

3
00:00:15,049 --> 00:00:13,500
that goes on top of the course stage

4
00:00:18,290 --> 00:00:15,059
which is the first stage of the SLS

5
00:00:20,300 --> 00:00:18,300
vehicle and it goes underneath the

6
00:00:22,279 --> 00:00:20,310
second stage which is the interim

7
00:00:24,200 --> 00:00:22,289
cryogenic propulsion stage which is much

8
00:00:26,089 --> 00:00:24,210
smaller because of the difference in

9
00:00:29,060 --> 00:00:26,099
diameter you need an adapter and that's

10
00:00:31,880 --> 00:00:29,070
that's what the lbs a does it adapts the

11
00:00:35,060 --> 00:00:31,890
smaller upper stays to the larger lower

12
00:00:38,630 --> 00:00:35,070
stage we are making a very large cone

13
00:00:40,430 --> 00:00:38,640

absolute cone size is 30 foot tall so

14
00:00:42,530 --> 00:00:40,440
imagine a three-story building that's

15
00:00:44,720 --> 00:00:42,540
shaped like a huge cone all made out of

16
00:00:46,970 --> 00:00:44,730
aluminum and all welded together we have

17
00:00:48,950 --> 00:00:46,980
ring segments up at the top coming from

18
00:00:51,020 --> 00:00:48,960
a major tool out in Indiana we have

19
00:00:53,299 --> 00:00:51,030
panels coming from California from a

20
00:00:55,069 --> 00:00:53,309
company named AMRO and we have some

21
00:00:56,689 --> 00:00:55,079
local shops doing work for us on the

22
00:00:59,450 --> 00:00:56,699
flight hardware itself they're bringing

23
00:01:01,130 --> 00:00:59,460
in segments of rings where we're gonna

24
00:01:03,020 --> 00:01:01,140
end up welding those all together at the

25
00:01:04,280 --> 00:01:03,030
bottom of the cone and from there we're

26
00:01:06,980 --> 00:01:04,290
going to go up and we're going to build

27
00:01:08,690 --> 00:01:06,990
two cones out of different pieces of

28
00:01:10,580 --> 00:01:08,700
material and that's because the cone is

29
00:01:12,500 --> 00:01:10,590
so large that it's got to be made in two

30
00:01:15,020 --> 00:01:12,510
piece two sets so you've got two small

31
00:01:17,330 --> 00:01:15,030
cones come in together to make one large

32
00:01:18,890 --> 00:01:17,340
cone and then on top of that very large

33
00:01:20,179 --> 00:01:18,900
cone is going to be another ring and

34
00:01:21,800 --> 00:01:20,189
that's going to finish out what the

35
00:01:23,270 --> 00:01:21,810
launch vehicle stage adapter really

36
00:01:25,340 --> 00:01:23,280
looks like when it's all said and done

37
00:01:27,679 --> 00:01:25,350
this particular unit is our very first

38
00:01:29,510 --> 00:01:27,689

LV si it's going to be used for our

39
00:01:32,030 --> 00:01:29,520
structural tests where we'll take

40
00:01:33,859 --> 00:01:32,040
several of the components that go on the

41
00:01:36,800 --> 00:01:33,869
top of the SLS rocket we'll put them in

42
00:01:40,399 --> 00:01:36,810
a large test stand and and subject them

43
00:01:42,620 --> 00:01:40,409
to the loads in excess of what they'll

44
00:01:45,200 --> 00:01:42,630
see in flight just to verify that our

45
00:01:47,539 --> 00:01:45,210
analysis is correct and that the vehicle

46
00:01:48,740 --> 00:01:47,549
will survive and from there we're going

47
00:01:50,690 --> 00:01:48,750
to take everything that we've been doing

48
00:01:52,340 --> 00:01:50,700
and we're gonna make the flight unit and

49
00:01:54,319 --> 00:01:52,350
that very first flight unit is gonna

50
00:01:55,670 --> 00:01:54,329
actually go up in space which makes this