
ENGINE 2045
ENGINE 2056
ENGINE 2060
CALDWELL
MARS

1
00:00:25,610 --> 00:00:21,030
t-minus 10 9 8 7 and we have been in

2
00:00:35,960 --> 00:00:25,620
dart 5 4 3

3
00:00:41,280 --> 00:00:38,730
one of NASA's largest ongoing projects

4
00:00:42,990 --> 00:00:41,290
is the Space Launch System or SLS which

5
00:00:45,090 --> 00:00:43,000
will one day allow us to explore deep

6
00:00:47,880 --> 00:00:45,100
space destinations like asteroids and

7
00:00:50,100 --> 00:00:47,890
eventually Mars in order to make the SLS

8
00:00:52,080 --> 00:00:50,110
a success NASA centers must collaborate

9
00:00:55,680 --> 00:00:52,090
with one another to accomplish mission

10
00:00:57,030 --> 00:00:55,690
goals and reach major milestones two of

11
00:00:58,770 --> 00:00:57,040
the center's collaborating on the SLS

12
00:01:00,690 --> 00:00:58,780
project are Marshall Space Flight Center

13
00:01:02,450 --> 00:01:00,700

in Huntsville Alabama and Stennis Space

14
00:01:05,160 --> 00:01:02,460
Center in Hancock County Mississippi

15
00:01:06,930 --> 00:01:05,170
while Marshall is a home to the SLS

16
00:01:08,999 --> 00:01:06,940
program in the liquid engines office

17
00:01:10,890 --> 00:01:09,009
Stennis Space Center has long been known

18
00:01:12,420 --> 00:01:10,900
as the agency's largest rocket testing

19
00:01:14,160 --> 00:01:12,430
facility and they have been extremely

20
00:01:18,330 --> 00:01:14,170
busy with the testing of the upgraded

21
00:01:20,280 --> 00:01:18,340
rs.25 engines in fact all rs.25 engine

22
00:01:20,999 --> 00:01:20,290
testing happens exclusively at Stennis

23
00:01:23,249 --> 00:01:21,009
Space Center

24
00:01:24,690 --> 00:01:23,259
if these engines look familiar to you it

25
00:01:26,940 --> 00:01:24,700
may be due to the fact that they were

26
00:01:29,790 --> 00:01:26,950
used as a space shuttle main engine for

27
00:01:31,980 --> 00:01:29,800
the last 30 years compared to the three

28
00:01:34,440 --> 00:01:31,990
rs.25 engines that the Space Shuttle had

29
00:01:37,230 --> 00:01:34,450
the SLS will utilize four of them to

30
00:01:39,480 --> 00:01:37,240
produce 2 million pounds of thrust the

31
00:01:41,430 --> 00:01:39,490
thorough testing of the rs.25 plays an

32
00:01:43,080 --> 00:01:41,440
essential role in upholding NASA's high

33
00:01:47,100 --> 00:01:43,090
standards of efficient and reliable

34
00:01:48,840 --> 00:01:47,110
engines did you know in 1985 several of

35
00:01:50,670 --> 00:01:48,850
the rocket complex test stands currently

36
00:01:52,230 --> 00:01:50,680
being used to test these engines at

37
00:01:54,240 --> 00:01:52,240
Stennis Space Center were deemed

38
00:01:55,980 --> 00:01:54,250

national historic landmarks due to their

39
00:01:58,260 --> 00:01:55,990
significance in the development of the

40
00:02:01,020 --> 00:01:58,270
Saturn 5 rocket used for the Apollo

41
00:02:03,899 --> 00:02:01,030
missions for more detailed information

42
00:02:05,520 --> 00:02:03,909
about NASA's rs.25 engines you can find

43
00:02:08,130 --> 00:02:05,530
the conference paper titled next

44
00:02:10,259 --> 00:02:08,140
generation rs.25 engines for the NASA

45
00:02:14,100 --> 00:02:10,269
space launch system on the nasa

46
00:02:15,180 --> 00:02:14,110
technical report server or NTR s the NTR

47
00:02:17,580 --> 00:02:15,190
s is one of the world's largest

48
00:02:19,500 --> 00:02:17,590
repositories of aerospace STI and

49
00:02:21,470 --> 00:02:19,510
features records ranging from the NACA

50
00:02:23,789 --> 00:02:21,480
era to today's cutting-edge research

51
00:02:27,880 --> 00:02:23,799
that's all for today thanks for watching

52
00:02:39,920 --> 00:02:37,910
[Music]