



1  
00:00:08,680 --> 00:00:05,090  
one zero and liftoff of the Delta 2 with

2  
00:00:10,850 --> 00:00:08,690  
Grail journey to the center of the Moon

3  
00:00:13,549 --> 00:00:10,860  
chamber pressure rising in all six

4  
00:00:18,120 --> 00:00:13,559  
grounded tablet motors the chamber

5  
00:00:27,190 --> 00:00:21,060  
chamber pressure huddleston bramlett

6  
00:03:19,980 --> 00:00:36,220  
you

7  
00:03:19,990 --> 00:05:24,870  
right

8  
00:05:24,880 --> 00:05:59,590  
you

9  
00:06:04,690 --> 00:06:02,740  
New Year's Eve the Grail a spacecraft

10  
00:06:06,790 --> 00:06:04,700  
was going to be sent into orbit around

11  
00:06:08,200 --> 00:06:06,800  
the moon all right we're going to go

12  
00:06:11,980 --> 00:06:08,210  
through the South Pole of the moon and

13  
00:06:14,560 --> 00:06:11,990

do about a 38 minute burn 38-minute

14

00:06:15,880 --> 00:06:14,570

maneuver to slow the spacecraft down

15

00:06:18,370 --> 00:06:15,890

enough so this is going to go into orbit

16

00:06:19,720 --> 00:06:18,380

around moon it's not really going to be

17

00:06:21,880 --> 00:06:19,730

nailed by the tents because we've

18

00:06:23,680 --> 00:06:21,890

practiced it a lot and a lot of testing

19

00:06:26,590 --> 00:06:23,690

but it's going to be a long time the

20

00:06:28,330 --> 00:06:26,600

maneuver takes 38 minutes and so we just

21

00:06:30,220 --> 00:06:28,340

have to have a lot of patience and we'll

22

00:06:32,740 --> 00:06:30,230

be able to monitor the progress the

23

00:06:34,870 --> 00:06:32,750

whole time through the event we have to

24

00:06:37,060 --> 00:06:34,880

do it twice because the grill a will go

25

00:06:39,370 --> 00:06:37,070

into orbit on New Year's Eve but Grail

26

00:06:41,980 --> 00:06:39,380

be the second spacecraft will go into

27

00:06:43,690 --> 00:06:41,990

orbit on new year's day so we repeat

28

00:06:46,150 --> 00:06:43,700

basically the same process to do that

29

00:06:49,300 --> 00:06:46,160

again another burn of around 38 minutes

30

00:06:55,950 --> 00:06:49,310

39 minutes and then the size of maneuver

31

00:07:01,499 --> 00:06:58,879

the purpose of the Grail mission is to

32

00:07:04,080 --> 00:07:01,509

gather data on the gravity of the moon

33

00:07:07,260 --> 00:07:04,090

and then the scientists use that gravity