

**ROB STOUGH**  
SLS UTILIZATION MANAGER



**SLS**  
SPACE LAUNCH SYSTEM

1  
00:00:00,855 --> 00:00:05,109  
Hi I'm Rob Stough the SLS Utilization  
Manager for the Space Launch

2  
00:00:05,109 --> 00:00:07,403  
System at NASA's Marshall  
Space Flight Center and

3  
00:00:07,403 --> 00:00:09,405  
this is Rocket Science in  
Sixty Seconds

4  
00:00:09,405 --> 00:00:12,533  
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5  
00:00:12,533 --> 00:00:16,203  
This SLS will launch Orion  
both uncrewed and crewed

6  
00:00:16,203 --> 00:00:19,040  
to the Moon and also launch  
the Europa Clipper spacecraft

7  
00:00:19,040 --> 00:00:20,416  
directly to Jupiter.

8  
00:00:20,416 --> 00:00:23,794  
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9  
00:00:23,794 --> 00:00:28,507  
For EM-1 we plan on testing  
the SLS, ground systems

10  
00:00:28,507 --> 00:00:31,135  
and the Orion spacecraft together  
for the first time.

11  
00:00:31,135 --> 00:00:35,598  
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12

00:00:35,598 --> 00:00:38,142

In order to leave the Earth's surface the SLS will fire

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00:00:38,184 --> 00:00:42,396

two rocket boosters and four RS-25's producing 8.8 million

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00:00:42,396 --> 00:00:43,522

pounds of thrust.

15

00:00:43,522 --> 00:00:46,650



16

00:00:46,650 --> 00:00:49,570

After the core stage drops off the upper stage, which is

17

00:00:49,570 --> 00:00:52,823

full of propellant. The upper stage will make a minor adjustment

18

00:00:52,823 --> 00:00:55,076

to its orbit and then perform trans-lunar injection.