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I'm Molly White, an aerospace engineer working on the heat shield design for the space craft right behind me;

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MUSIC

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I work on the design of the heat shield which is the exterior layer of the space craft

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that protects it from the extreme temperatures during re-entry.

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This can get really, really hot like two-times the temperatures of molten lava.

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During the return home from Mars, the astronauts will come back through the atmosphere inside Orion.

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The vehicle will have to be able to withstand extreme temperatures during its re-entry into earth's atmosphere.

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The most recent mission landing on Mars of the Curiosity Rover,

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tested the heat shield design for that vehicle

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and knowing how well we did on that design can translate back to Orion's design.

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Plus we landed this really cool Rover that's paving the way for human exploration.

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The 2014 test of Orion gave us a lot of really great data to be able work on the next iteration of Orion's design.

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I was there at the launch, I got to see the rocket go up and it just disappeared and we just crossed our fingers a

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00:01:13,500 --> 00:01:18,500

On my design team, the best thing that we got back from the flight test was all of the data.