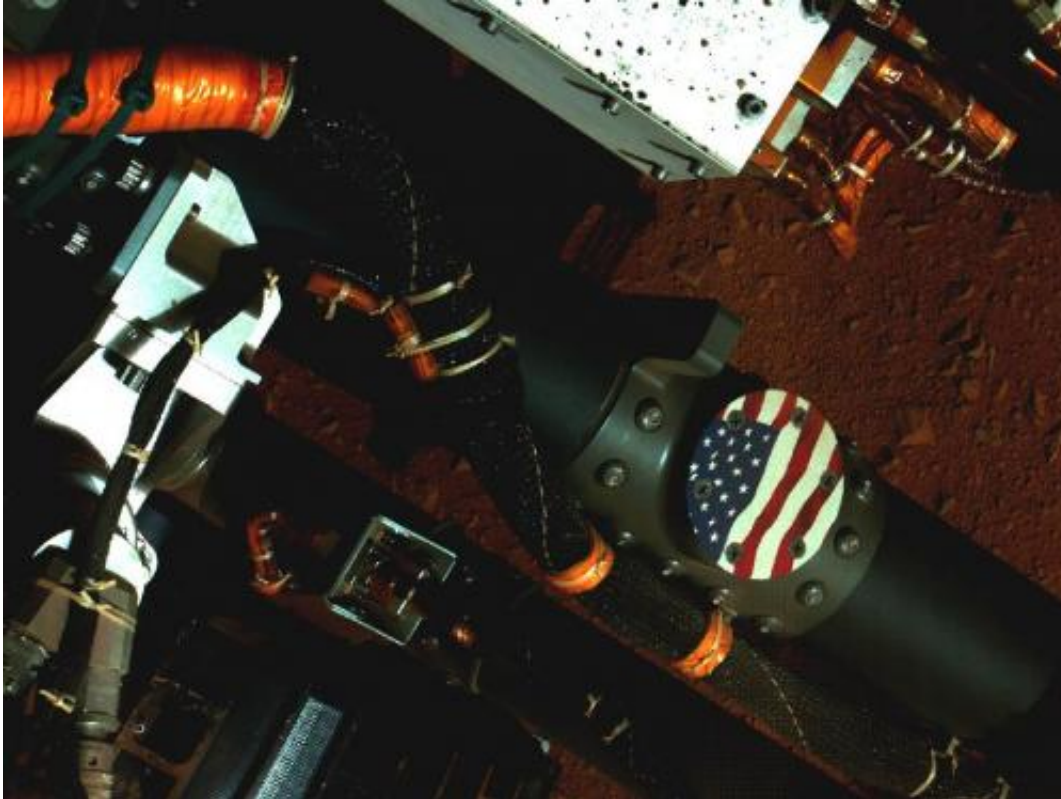


# Why Curiosity matters

September 24 2012, by Dauna D. Coulter

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Curiosity's Stars and Stripes: This view of the American flag medallion on NASA's Mars rover Curiosity was taken by the rover's Mars Hand Lens Imager (MAHLI) during the 44th Martian day, or sol, of Curiosity's work on Mars (Sept. 19, 2012). The flag is one of four "mobility logos" placed on the rover's mobility rocker arms. Credit: NASA

Adam Steltzner doesn't sound much like an ordinary engineer.

For instance, when we asked him if he would talk about Curiosity—and

explain why the Mars rover matters to [ordinary people](#)—the former rock-n-roller responded "I'm totally down with that."

He really is down with it. Steltzner is the [NASA](#) engineer who helped take the country's cool new Curiosity rover to the surface of Mars with moves – and flair – even Evel Knievel would envy.

Steltzner begins, "I'm so thankful to Clara Ma for suggesting the name 'Curiosity.' It embodies a fundamental attribute that defines us as humans. "

"Why do we explore? It's our nature," he says. "Human curiosity is why you and I can talk across the country by phone. It's why I'm sitting 60 feet above the ground in a building made of [alloys](#) and other high-tech [composite materials](#). We dominate this planet because we wonder what's around the next corner."

When people ask Steltzner "Is the new rover worth 2 ½ billion dollars?" he has a compelling answer:

"It's not 2 ½ [billion dollars](#) we stuffed in a trunk and blew into space. It's thousands of high tech jobs spread over 37 states. It's honing and developing our skills in science, engineering, and math."

He notes that the U.S. has slipped to 14th in [science education](#) and 18th in math – in a world where we're competing for [economic prosperity](#) with nations 1 through 13.

"This mission is an investment in high tech jobs, in inspiring the youth of our country, in stepping up rung by rung toward 1st place. It's the best [stimulus](#) you could imagine!"

Okay, curiosity matters—but does it matter more than rock-n-roll?

Steltzner played guitar in a rock band for years, so he has the chops to answer this question, too.

"In some sense, exploration and music are both art forms," he says. "They're both expressions of our humanity. But exploration can surprise us more - or at least differently - than music can. Music can surprise us only about what we find in ourselves. Exploration surprises us with what we learn of ourselves and of the universe."

Steltzner says music led him to exploration. During high school he played in a [rock band](#). One night driving home from a gig he noticed that the constellation Orion was in a different place than it had been before.

But why? "I hadn't paid attention during high school classes at all. So I didn't know."

His curiosity made him decide to take an astronomy class. First, though, astronomy had prerequisites such as elementary algebra and conceptual physics. He took them all. "I basically redid my high school education at the community college."

The rest—which includes a bachelor's degree from UC Davis, a master's degree from Caltech, a job at JPL, and a daredevil landing on Mars—is history.

After the glory of the Curiosity landing fades, what will this explorer do next?

"Our solar system offers us grand challenges," says Steltzner. "I'd like to see a Mars sample return. I'd like to land on the surface of Europa – the most likely place in the solar system for life. And third, I'd like to float a boat on the methane lakes of Titan."

"The solar system is calling out to us," he says. "The wind's at our back. It's time to explore!"

Provided by NASA

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