

New exhibits at Virginia Air and Space Center inform and inspire



Engineer It: An Imagination Playground allows kids to use their creative minds. (Courtesy of the Virginia Air & Space)



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JULY 2, 2015, 12:57 PM

HAMPTON — The Virginia Air & Space Center is opening two new exhibits this weekend — a hands-on project that aims to educate, and an immersive one that engages the emotions.

Engineer It: An Imagination Playground uses blocks of different sizes to give kids creative license to build things, all in a way that subtly stresses STEM education (especially the "E" that stands for engineering). Meanwhile, Solarium tries to recreate the experience of visiting the sun (only without the heat).

Robert Griesmer, the Air & Space Center's executive director, is particularly excited about opening these two exhibits as the Fourth of July weekend kicks the summer season into high gear.

Solarium takes a concept created at the Goddard Space Flight Center in Maryland — projecting high-definition images of the sun's surface onto a large wall — and expands it threefold. At the Air & Space Center, visitors will be surrounded by three walls worth of images.

"We took all the great creative work they did at Goddard and we took it to the next level," Griesmer said.

The Goddard center's website notes that the exhibit uses images gathered by NASA's Solar Dynamics Observatory, which "watches ultraviolet light invisible to the naked eye to track how material dances through the solar atmosphere." The observatory shoots almost a photo per second, with almost 10 times the resolution of HD-TV.

The images have many practical applications for scientists, but Griesmer said at the Air & Space Center it is more of a visceral experience.

"We don't give you a lot of material with Solarium that analyzes it and tells you what it means and what you should think about it," he said. "It's really more about how it makes you feel, and how each person processes the sights and sounds that we surround them with."

Genna Duberstein, lead multimedia producer for heliophysics at Goddard, said it was a conscious decision to use no narration and no music in Solarium. Instead, its sound is derived from authentic solar data to enhance the immersive experience.

"In its simplicity, Solarium does more than inform — it inspires," Duberstein said. "I'd say inspiration is hugely important to education, whether that be in science or in art. It really has to be the first step to learning something new. Solarium ignites a desire to learn more. Everywhere the installation goes, it starts conversations in the science community about art and in the art community about science."

Similarly, Engineer It: An Imagination Playground comes with few instructions. Rather, it provides children with raw material and challenges them to figure out ways to create something. But it is absolutely designed in a way that engages their minds in an analytical way.

The children can use interconnecting blocks of different shapes and sizes to construct whatever their imagination tells them. It is designed in a way to encourage working together, rather than alone.

"As they work on it, different kids will emerge as leaders," Griesmer said. "And then you can try to move them around so that other leaders emerge and everyone becomes a part of it. It's a pretty amazing process to watch."

The lessons learned at An Imagination Playground may complement information that kids and families pick up from "Robots," the entertaining and educational film that just opened on the Air & Space Center's IMAX

screen (alongside "Living in the Age of Airplanes" and "Journey to Space"). Under the museum's new price structure, the \$18 fee (\$14.50 for kids) gets you an IMAX film at no additional charge.

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Want to go?

The Virginia Air & Space Center is located at 600 Settlers Landing Road in Hampton. For full details, call 757-727-0900 or go online to vasc.org.

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