

DAVID HUER

... profitably ahead of the curve

ABOUT DAVID UNPACKED SOLUTIONS
"NEWSPACE" HOLIDAY GREETINGS ANNUAL



Astronaut Double Amputees and Paraplegians?

Posted on 16/06/2016 by innovadmin

It's all about perspective.

And tenacity.

And determination.

And character.



After NASA
Astronaut Scott
Kelly and
Russian
cosmonaut
Mikhail
Kornienko of

Recent Posts

SETG ("SETI Garbage – Exoplanets Hunt" Update)

Technique to continuously develop and improve discovery hypotheses

Update to "Mobius Universe" (2014, 2021)

Interplanetary Patents Enforceability

Space Tech Procurement Contracts note

Archives

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Roscosmos got home from a year in space this past spring, the US Congress began examining whether to provide lifetime health benefits to astronauts. Many are ex-military and get benefits that way. NASA will monitor recipients for long-duration mission health planning.

At industrial design school, one of my human factors projects was a spider-like astrogeology exoskeleton, designed so geologists could move along a cliff face looking at strata. And the thinking fed into iteration #1 of my design thesis: one of the first social web wearables; a performance tool for whitewater slalom athletes. But a bigger aspect of the thinking keeps coming back to me: A question that might help address the dilemma of bone loss. A question that keeps coming back after doing WarriorHealth CombatCare and finding out about the fine work done at Walter Reed National Military Medical Center in Bethesda, MD.



Is a veteran with paraplegia or no legs the natural spacecraft driver?

Since bone density loss is a key barrier to long-term low gravity living...aren't

technically-trained veteran paraplegians and double amputees great candidates for the astronaut corps? Does a fighter pilot

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August 2018

June 2018

May 2018

January 2018

December 2017

November 2017

October 2017

September 2017

June 2017

May 2017

December 2016

October 2016

September 2016

July 2016

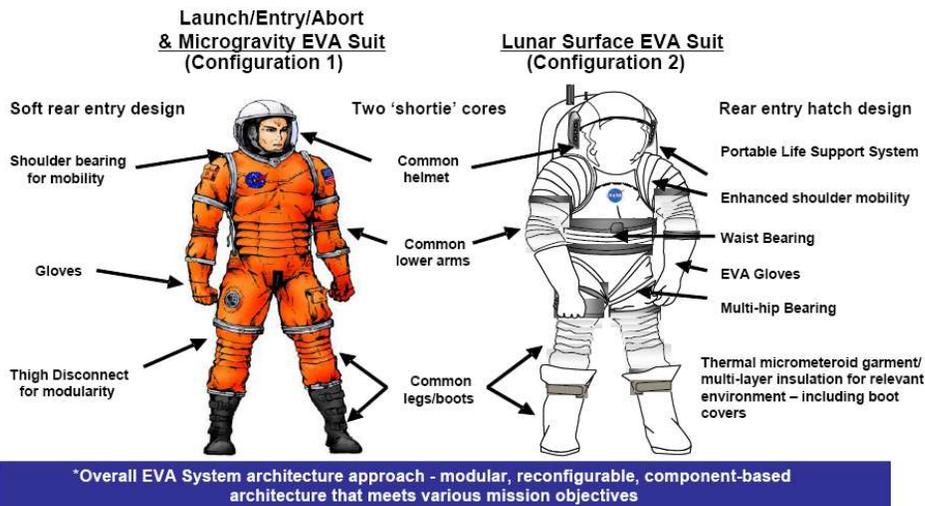
June 2016

January 2016

have the discipline, skill and temperament to be a launch driver?
Does an armored division tanker have the skills to be an in-flight systems specialist?

Does USMC Corporal Todd Love (an incredibly inspirational guy! seen here) really *need* legs to operate in micro-gravity, when he might only need wheels on the ground? (As you can see, he does not need legs whatsoever).

I ask you...



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September 2015

April 2015

February 2015

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June 2014

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Managing Risks

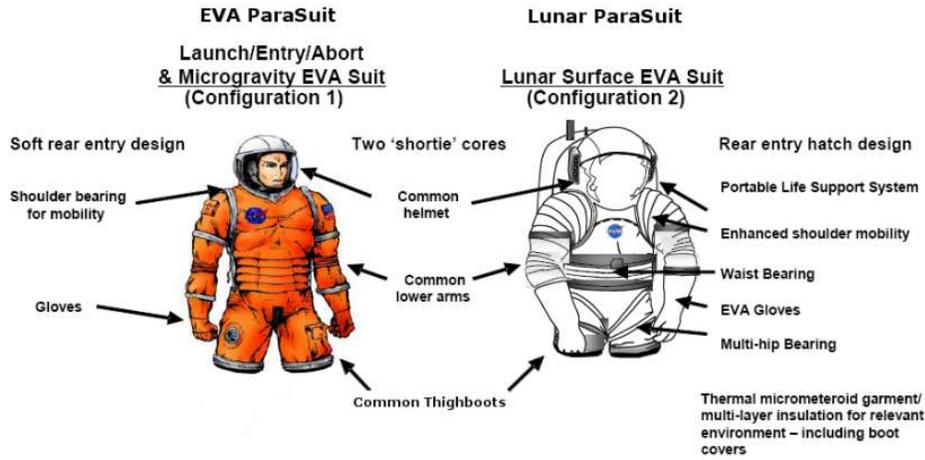
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Resources for

Entrepreneurs

Rethinking Energy & Resources

Thinking Wonder



***Overall EVA System architecture approach - modular, reconfigurable, component-based architecture that meets various mission objectives**

Could this approach create uplifting new opportunities to serve and thrive in a way that makes the unavoidable SCI injury extraordinarily valuable?

Aren't two-legged people naturally less *abled* in the spaceflight environment?

Who is the more-natural space-athlete?

Who is the *more-natural* astronaut?

David Huer

Numbers

US veterans with Spinal Cord Injury (SCI) as of 2008: 26,000 veterans
<http://www.military.com/benefits/veterans-health-care/veterans-with-spinal-cord-injury-disorders.html>

US citizens with SCI: 240,000 and 337,000 people

New injuries per year, as of 2015: 12,500 people

<http://www.sci-info-pages.com/facts.html>

Latest EVA suit made by Oceaneering Inc. (Houston, TX):

http://www.nasa.gov/pdf/246726main_ConstellationSpaceSuitSystemBriefing.pdf

Interesting aspects of design/safety aspects

- * Effect to bone mass/density and to body functions
- * Pant legs + boots: removed – aperture and material needs cut by ~40%, with 5 apertures (head, left & right arm, left & right leg) reduced to 3.
- * Electronic components & new designs for torso & new “thighboots”
- * “Thighboots” reduce the dangers of entanglement & provide push-off tasking as needed
- * External prosthetics designed to attach to thighboots

Healthcare research outcome:

Could NASA, the VA and DoD assess impact on SCI to help society groundside?

Images:

US Astronaut Tom Jones (STS-129):

<https://skywalking1.files.wordpress.com/2009/11/tom-reaching-for-lab-umbilicals-sts098-330-0071.jpg>

USMC Corporal Todd Love and Team X-T.R.E.M.E. competing in The Spartan Race, Leesburg, VA, 2012: <http://www.dailymail.co.uk/news/article-2195897/Triple-amputee-veteran-completes-grueling-10-5-mile-endurance-race-called-The-Beast-hours-honor-fallen-U-S-soldiers.html>

Constellation EVA Spacesuit: NASA

http://www.nasa.gov/pdf/246726main_ConstellationSpaceSuitSystemBriefing.pdf

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(Image modified with removal of lower extremities in image)

This entry was posted in Managing Risks, Thinking Wonder, Wicked Solutions and tagged amputee, Astronaut, Constellation EVA, DoD, double amputee, human factors, Mikhail Kornienko, NASA, newtsuit, nuytco, oceaneering, paraplegia, Roscosmos, Russia, SCI, Scott Kelly, spaceduit, spaceflight, spacewalk, spinal cord injury, Todd Love, USA, USMC, VA, veterans, Walter Reed NMMC. Bookmark the permalink. Edit

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Header: Re-entry of Progress
Spacecraft 42P. Public Domain, NASA Earth Observatory. Taken on October 29, 2011. High resolution image's aspect ratio modified. Attribution 2.0 Generic (CC BY 2.0).
<http://eoimages.gsfc.nasa.gov/>

Posting Calendar

December 2025

M	T	W	T	F	S	S
1	2	3	4	5	6	7
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