

# Re: Man-Rating Atlas V

---

*Source:* <http://sci.tech-archive.net/Archive/sci.space.policy/2006-10/msg00098.html>

---

- *From:* "Will McLean" <[mclean1382@xxxxxxx](mailto:mclean1382@xxxxxxx)>
  - *Date:* 2 Oct 2006 19:56:34 -0700
- 

Jonathan Goff wrote:

Will,  
Which is probably adequate for a LEO ferry, but not for the CEV, which has an explicit requirement of being roomy enough for the longer lunar mission and having enough delta-v to come back from lunar orbit.

Of course, the particular architecture ESAS settled on was far from the only way of skinning the cat. For instance, for the ~30klb CEV weight under discussion, you could launch one capsule, one Bigelow Sundancer module, and one LOX/Kero or LOX/Methane propulsion module capable of providing the delta-V.

On the other hand, NASA was probably correct in believing that, all other things being equal, the fewer launches the better.

If you replace the stick with the simplest Atlas V, then a two-launch mission becomes a three-launch mission. This mission should be compared with other three-launch options, and so on.

Will McLean