

Re: Direct 2.0 space transportation system

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"Pat Flannery" <flanner@xxxxxxxxxx> wrote in message
news:Fu2dnTX5Q9F-5-DVnZ2dnUVZ_judnZ2d@xx

I'm sure everyone down at NASA knows about it, and I'm also sure that those in the know might look at what happened to the Soviet Moon program when they were funding the N-1 and UR-700 simultaneously. There comes a point in a program where you have to make a choice and devote your efforts to it if you want to accomplish anything.

If Ares I and Ares V succeed, I'm sure Griffin is expecting to be remembered as some sort of new Wernher von Braun. Unfortunately for Griffin, he's had to drop the high ISP SSME's from the designs which have horribly warped the Ares I and V designs. von Braun also had the venerable F-1 engine to work with while Griffin is saddled with using shuttle derived SRB's. :-)

We could have built the Saturn V and Nova simultaneously, but we decided to devote our efforts to the Saturn V due to funding constraints.

Not quite the same thing. The N-1 and UR-700 were completely different projects by completely different organizations. von Braun's team would have done both Saturn V and Nova so you get some economies of scale there. Actually, what Griffin is doing with Ares I and Ares V is similar to doing Saturn V and Nova at the same time.

That's one of the DIRECT teams arguments for Jupiter. Both the Jupiter 120 and the Jupiter 232 use the same SRB's as the shuttle and both use the very same core stage design. The only difference in the core stage is that the 120 lacks one RS-68 engine. The Jupiter 120 is not optimized for the lighter payload.

The Jupiter 232 is the same vehicle as the 120, only with an extra RS-68 engine on the first stage and with an upper stage (what NASA is calling the EDS). This commonality with shuttle hardware and commonality between the two versions of the launch vehicle mean less development costs and lower fixed and reoccurring costs than Ares I/V which are two very different

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vehicles.

With DIRECT, a lunar mission takes two launches of the Jupiter 232. With Ares, you need one Ares I 1