

Re: Air Force Signs Off on SRB-CEV

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- *From:* Brian Thorn <bthorn64@xxxxxxx>
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On 16 Aug 2005 07:42:00 -0700, "Ed Kyle" <edkyle99@xxxxxxxxxxxxx> wrote:

>I think Boeing did this comparison several years ago
>and decided to keep Delta II and cancel Delta IV Light
>(I'm assuming that is what you mean by "small upper
>stage"). But even a Delta IV Light would have 1.5
>times or so more dry mass than a Delta 7920, so the
>odds are that it would have higher marginal costs.

Is dry mass relevant, though? Since Delta II uses nine solids, and there is no such thing as an unfueled solid, its hard to figure out the bird's dry mass. But a fueled Delta IV-Lite (guessing about PAM as an upper stage) would seem to compare favorably to a fueled nine-solid Delta II (especially II-H).

>On the other hand, if the argument is that the
>bigger EELV vehicles are so flexible and wonderful
>that they can handle the Delta II class payloads,
>then, since the EELVs duplicate each other and
>would still be underutilized even with the Delta II
>payloads, why not shut down *two* production lines
>and just keep one EELV?

Well, the two EELVs have a little commonality, at least in the RL-10 engine that they just don't share with Delta II. So there should be some cost savings there by getting rid of Delta II-specific hardware. And don't forget the launch facilities. Delta II is still using the ancient Complex 17, whereas the two EELVs have brand-spanking-new launch facilities at the Cape and Delta IV is taking over the much more modern SLC-6 at VAFB (though Atlas 5 is taking over another ancient pad at VAFB). I think this all points to Delta II being the third-runner-up in cost and efficiency.

>I think the latter option is where we're heading.

I disagree. Even with major budget crunching threatening its pet programs (F-22 and F-35) and badly needed transports (V-22 and more C-17s) the Air Force doesn't even seem to be considering shutting down

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one of the EELVs. Even when Boeing got caught cheating with LockMart proprietary data to win EELV contracts, the Air Force *still* didn't kill Delta IV when by all rights they could have. There just is no rational argument that one of the EELVs will be dropped anytime in the near future.

>All three production lines are going to be under
>one roof soon. If Delta II is shut down, and it
>seems the pressure is on to shut it down, then
>this co-production setup, where the Alliance will
>supposedly pick the best vehicle for each payload,
>will soon find itself picking only the better of
>the two EELVs (and I think we all know which one
>it is) over and over again. They won't have to
>shut down one of the EELV lines. It will just
>stop running by default.

And be available if someone wants it in the future, sort of like Airbus' A340, which they can make as long as they're making A330s.

Brian

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◇ From: Ed Kyle

• *References:*

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◇ From: Ed Kyle
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◇ From: Ed Kyle
- ◆ *Re: Air Force Signs Off on SRB-CEV*
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