

Re: Griffin Wants Inline SDLV and 5 Segment SRB/CEV

Source: <http://sci.tech--archive.net/Archive/sci.space.policy/2005-07/msg00393.html>

- *From:* "Murray Anderson" <murraya@xxxxxxxxxxxxx>
 - *Date:* Sun, 10 Jul 2005 21:39:58 -0400
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"Rand Simberg" <simberg.interglobal@xxxxxxxxxx> wrote in message news:42e7eedd.169387997@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
> On Sun, 10 Jul 2005 19:07:35 -0400, in a place far, far away, "Murray
> Anderson" <murraya@xxxxxxxxxxxxx> made the phosphor on my monitor glow
> in such a way as to indicate that:

>
>>> >It wasn't necessary to have a fly-back booster – just recover the
liquid
>>> >boosters the way the SRB's are recovered.
>>>
>>> That would still have cost more than they had budget for (solids are
>>> cheaper to develop than liquids, honest), and it's not at all clear
>>> how refurbishable a liquid in that class would be after being dropped
>>> in the ocean, Truax's limited experiments aside.
>>
>>They didn't know how refurbishable the solid would be either.
>
> They did, since they don't refurbish it—they rebuild it from the
> recovered segments, with new grain.

>
It's the same with a liquid booster, except for the engine assembly – you
just refill the tanks.

The engine nozzle and gimbaling system of the solid are supposedly
recovered and reused, which would be like the engine assembly on the
liquid – except for the turbopump system.

There would be a difference if the turbopump system were harder to protect
from seawater than the gimbaling system on the solid.

>>> >So it's cheaper to develop, with large upper stage, than Delta IV
Heavy,
>>> >which already exists?
>>>
>>> Delta IV heavy doesn't have the payload they want, and getting it
>>> (with man rating) probably will cost more than the development of the
>>> Satay.
>>>