

Re: We can meet all our needs through space development

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- *From:* Einar <ainarbb@xxxxxxxx>
 - *Date:* Wed, 30 Jan 2008 18:25:45 -0800 (PST)
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On Jan 30, 3:08 pm, Willie.Moo...@xxxxxxxx wrote:

On Jan 30, 9:44 am, Ian Parker <ianpark...@xxxxxxxx> wrote:

On 30 Jan, 12:18, Einar <eina...@xxxxxxxx> wrote:

On Jan 29, 2:13 pm, "Mike Combs"

<mikeco...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

"Einar" <eina...@xxxxxxxx> wrote in message

news:b8db2464-6d7e-47c1-b641-870a89468e4e@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

This sounds more like one
would hope that the world at
2099
might be like.

Write a schy fy book on
this, a suggestion.

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It will most certainly remain a very-distant
science-fiction-y concept for
as long as we choose to view it as such.

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Regards,
Mike Combs

By all that you hold dear on this good Earth
I bid you stand, Men of the West!
Aragorn

Now, SpaceX is still struggling with their rocket, Ares is in
development problems...and yet those are a lot less ambitious
than
what is suggested here something with 500 ton LEO
capability.

It's plans like these with everything assumed to go right that
aren't
believable.

I don't understand Ares. How is it that almost 40 years ago Armstrong
and Aldrin went to the Moon on top of a Saturn 5? In what respects is
Ares "better" than Saturn? Certainly not in \$/Kg.

– Ian Parker– Hide quoted text –

– Show quoted text –

Its a function of the amount of money spent and how wisely it is
spent.

I have given you my ideas here. Einar says they're not believable and
compares what I have proposed with something on a whole different

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order – apples and oranges.

Saturn V cost \$9 billion and 6 years to develop – using results of DOD programs on the E1/F1 and J2 engines with 13 vehicles built and flown.

I propose taking an ET sized airframe propelled by an annular aerospike engine, with an RS-68 pumpset (3) in each engine – to produce a ET sized booster– stretched 40% – massing 1,000 tons at lift off, creating 1,400 tons thrust at lift off – operating 7 at a time to create a three stage operation to loft 500 tons to LEO. They will have an advanced thermal protection system and be fully recoverable with downrange tow planes picking up the pieces.

I estimate that this program will cost \$6 billion to complete in 4 years and result in 4 vehicles that put 500 metric tons into orbit each launch at a cost of \$70 million (\$10 million per element per flight)

Why does this seem infeasible? What specifically is infeasible about it?

Mind you, you are suggesting a difficult and expensive development program. You are actually suggesting a good number of expensive and difficult development programs.

You may have some money, but you are not a trillionaire.

I mentioned the other programs to demonstrate that much less ambitious projects have run into development difficulties, meaning...ought to have been blatantly obvious...that your program is likely to encounter development difficulties scales large as well.

Maybe you can find trillions to spend when all of what you are proposing is added together.

Clearly, the mere development of that craft will take a while.

There will have to be experiments, i.e. the aerospike engine is yet to actually fly. Now, you might pay for this if you would first use the thing in a singular to launch satellites for some time, till the bugs have been worked out.

Then the development curve could be something similar to what say Kistler is trying to achieve, first trying to establish a reusable launch vehicle and later they intend to expand on it. Space X intends the same.

Now, that can lead to a family of launch vehicles, eventually the large powerful vehicle can be realized in manageable steps. Then as you suggest multiples of that can be used.

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This is a development process of something on the order of 20 – 30 years for the vehicle alone.

Einar

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