

Re: On the Nature of Exploration

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From: Dave O'Neill (*dave_at_atomicrazor.com*)

Date: 07/22/04

Date: 22 Jul 2004 02:43:46 -0700

edwright2000@hotmail.com (Edward Wright) wrote in message
news:<32b558f9.0407212207.7b67aeb3@posting.google.com>...

> *daveon@gmail.com (Dave O'Neill) wrote in message
news:<688c9efc.0407200059.16a52a8b@posting.google.com>...*

>

> > *It's a fun vehicle, built for a specific purpose and it looks cool.*

> > *Looks like a certain insurance company are going to lose a bet.*

> >

> > *However, it's built for a specific purpose, the X Prize. It is not*

> > *orbital, it doesn't have to worry about a lot of *hard* stuff, like*

> > *moving at 9000m/s rather than 900(ish)m/s – that's a lot of energy*

> > *missing from the equation.*

>

> *The first airplanes didn't fly at hundreds of miles per hour. They*

> *didn't cruise at thousands of feet. They didn't carry hundreds of*

> *people or tons of cargo. They didn't do any of the "hard" stuff. There*

> *was a lot of energy missing from that equation.*

No, actually they did do all the hard stuff for heavier than air flight. They demonstrated sustained powered flight, they showed how to control an aircraft (that being the really hard thing which had beaten previous attempts) and they had a light weight engine.

For the purposes of powered flight anybody could take that design, play with it and have an aircraft and within a few years lots and lots of people all over the world were. 5 years later people were making long sustained flights over wide bodies of water.

SS1 has shown that we can fly a low Mach numbers at high altitude. Something we already knew how to do (we being humans) – what they might be able to do is show that a fairish number of people want to do it, which would be a move forward.

They have not demonstrated that this is a step into orbital or a dramatic reduction in cost to LEO.

> *Thus, it was unrealistic to expect airplanes would improve. They would
> never be more than fun machines built for a specific purpose and cool*

> *looks, right?*

Like balloons and airships?

For a while aircraft were fun machines, fortunately a lot of cash, a lot of people playing in their garages, a war and a shift in technology paradigm solved that for us.

> > *There's no need for a proper life support system as it doesn't spend
> > any time to speak of, in space.*

>

> *That would be true, except for the fact that it spends over an hour
> climbing to the launch altitude. For that reason, SpaceShip One needs
> (and has) a "proper" life-support system.*

>

> *You should check your facts before making absolute statements.*

According to the Scaled press releases on this, they don't have a "proper" life support system beyond oxygen because the vehicle doesn't spend long enough at a significant altitude to need one.

> > *He did not and has not demonstrated we can do the same for orbital
> > vehicles at similar price points and I'm still not convinced that he
> > will, it wasn't what he was trying to show with this vehicle.*

>

> *He hasn't gotten to Alpha Centauri yet, either. So what?*

>

> *With your attitude, there's no point in doing anything, because
> there's always something more ambitious that you could do, and that
> thing is probably impossible because you haven't done it yet. Why even
> bother getting out of bed in the morning?*

Nonsense Ed.

Either you're realistic about the challenges that the industry and space travel face or not. I'm not.

I don't believe that following SS1, for example, millions upon millions in private capital is going to flooding into private space companies.