

Re: Borrowed time?

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- *From:* David Ball <davidbemail-1q04@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 28 Jul 2005 03:58:25 -0500
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On 28 Jul 2005 00:39:05 GMT, dg411@xxxxxxxxxxxxxxxxxxxxxx (Andre Lieven) wrote:

>
>Me (Pkevinf@xxxxxxxxxxxx) writes:
>> First post here and I'm curious... If this foam thing was such an
>> issue why is it SO important now?
>
>Because, two and a half years ago, such a piece of foam killed the
>Columbia, and that that type of event was not considered a possibility
>at the time, based on what was known about foam and it's shedding.
>
>Due to that disaster, we found out more of what was not known. Based
>on the imagery from yesterday's launch and boost phase, we know yet
>more that we did not know.
>
>The next step, and the harder step, is to figure out what is the
>best thing to do, both short term and longer term, about it.
>
>That won't be figured out in a week...
>
>> They had to have known things over
>> the dozens and dozens of flights....
>
>Indeed. But, as no other spacecraft remotely similar had ever flown,
>anywhere, any time, by any one, the gap between " we know enough to
>declare this technology fully mature " (Even jetliners don't always
>meet that criterion: When the 747 blew up off from Long Island, NY,
>about a decade ago, it was thought that wing fuel tank issues were
>fully understood. As it turned out, that crash proved that that
>knowledge base was good, but not sufficient to prevent such issues
>from killing a plane.) and " One reason we're flying this thing
>is to find out what we need to know *to* fly this thing, so that
>later things like this will have the benefit of that knowledge/
>experience ".

Actually, I saw a bit on TV about the 747 within the last week. I don't recall if it was on the news or was a documentary mentioning the

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nanotech in the new inerting system. Anyway, IIRC, they said that there was a system to inert the gas in the fuel tanks on the 747 years ago, but none of the airlines took the option because of the weight. Now there's a new lighter system that only inertes the center tank. I think the FAA is requiring that one, but I could be mixing up that detail with the documentary that was talking about TCAS being mandated and how they changed the training for US pilots after a mid-air collision where a foreign airline pilot followed the instructions TCAS gave and a US pilot followed ATC commands (which were opposite). I think the new rule is that TCAS always wins (which had been what foreign pilots were taught).

They said that it was interesting that the new entertainment systems the airlines installed weighted 2 – 3 times as much as the original system to inert all the tanks, but the airlines could use the entertainment system as a selling point so they tolerated the extra weight, but safety was always assumed by the flying public. Wish I could remember more details and exactly where I saw this.

>

>Its going to be a *long* time before anything about manned spaceflight
>can be considered technologically mature. Lets say, a few thousand or
>ten thousand flights. After all, as of 1996, there had been tens of
>thousands of 747 flights, and the makers and operators didn't know
>everything....

>

>> I have to think crap was falling off all along...

>

>Thats likely, yes. There may be differences between the variants
>of the ETs, but as we didn't have such camera use when the first
>and second types of tanks were in use, we simply do not know.

I was channel flipping watching the launch and post-launch coverage. I think one of the retired shuttle astronauts they interviewed, referring to earlier shuttle flights, said something about so much stuff coming off the tank early on that it looked like it was snowing.

>

>Andre

-- David

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• *References:*

◆ *Borrowed time?*

◇ *From: Me*

Re: Borrowed time?

◆ **Re: Borrowed time?**

◇ *From:* Andre Lieven

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