

Re: Discovery Landing – Charred Sides?

Source: <http://sci.tech-archive.net/Archive/sci.space.shuttle/2006-07/msg00848.html>

- *From:* Craig Fink <WeBeGood@xxxxxxxx>
 - *Date:* Mon, 17 Jul 2006 21:02:50 GMT
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On entry, they fly a zero angle of sideslip, well, what the On-Board software thinks is zero. But is it truly zero? On thing that might cause the angle of sideslip to be none zero would be extremely high level winds that aren't accounted for. How many entry groundtracks has the Shuttle flown from ISS that land on the ascending portion of the orbit? Over the Yucatan?

On Mon, 17 Jul 2006 20:19:50 +0000, Tom Kent wrote:

Here's Discovery landing in 2000, no major scorch marks:
<http://www-pao.ksc.nasa.gov/kscpao/images/large/00pp1673.jpg>

Here's Discovery taking off two weeks ago:
<http://www-pao.ksc.nasa.gov/kscpao/images/large/06pp1463.jpg> There's some stuff, but not nearly as bad as the landing image. The majority of the marks occurred on this mission, after liftoff, and while there may be a cumulative aspect to them, something made them much more pronounced this time than anything else I've seen.

Here's another image from today. Its of the other side of the orbiter:
<http://www-pao.ksc.nasa.gov/kscpao/images/large/06pd1588.jpg> The marking makes a fairly abrupt stop along a line that runs about 20 degrees above the wing. Makes me think that this happened while there were aerodynamic effects on the orbiter (not in-orbit thruster firing or something). My first guess is during re-entry since no one seems to have noticed anything about this in orbit. The second guess though would be something during SRB separation. Did anything change with respect to the airflow over the orbiter that would cause the SRB separation engines to deposit material on the orbiter? If this happened would it cause that angle of a line over the wing?

Tom

"cole smith" <lcs1h@xxxxxxxxxxxx> wrote in message
news:UfudnV6iYpITOCbZnZ2dnUVZ_rednZ2d@xxxxxxxxxxxxxxxx

Re: Discovery Landing – Charred Sides?

Endeavor has seen fewer flights, and I think the charring is somewhat cumulative. But it does look like it goes further up the sides than I recall before. Someone should post more post-landing pics from other flights (especially Discovery).

During the post-landing walk-around video inspection I noticed the camera operator quite deliberately climbed up the stairs to the hatch and videoed what looked like a lot of charring around the hatch door. It may be normal but I haven't seen them do that before.

LCS

"Tom Kent" <thomas.m.kent@xxxxxxxxxx> wrote in message
news:J2K6HG.5D6@xxxxxxxxxxxxxxxxxxxxxx

I just watched the video of the landing, and i noticed that the sides looked a lot more charred than normal. After quickly looking on NASA's site for previous landing images I found one from STS112, the comparison is remarkable. Is this a big deal? Has this been seen before?

Comparison:
<http://mcbain.teeks99.com/STS121LandingCompare.png>

Tom

—
Craig Fink
Courtesy E-Mail Welcome @ WeBeGood@xxxxxxxxxx