

# Re: Shuttle damaged during thunderstorm

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- *From:* "Jeff Findley" <[jeff.findley@xxxxxxxxxxxxxxxx](mailto:jeff.findley@xxxxxxxxxxxxxxxx)>
  - *Date:* Fri, 2 Mar 2007 09:51:20 -0500
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"Pat Flannery" <[flanner@xxxxxxxxxx](mailto:flanner@xxxxxxxxxx)> wrote in message  
<news:12ugbsf4i5ntke3@xxxxxxxxxxxxxxxxxxxxxxxx>

Jeff Findley wrote:

Do hail divots increase foam shedding, and if so, would the areas impacted by hail produce foam shedding which could damage the shuttle's TPS?

I'd be worried about:

- 1.) The divots causing openings in the foam where water could get into it and freeze, leading to cracking due to ice expansion.
- 2.) The physical impact of the hail causing hairline cracks in the foam, weakening its attachment to the tank and leading to shedding during ascent.

It would seem like the conservative thing to do would be to replace the ET with the ET which would have been used for the next mission and take your time determining how to best fix the damaged tank. Unfortunately, there is always schedule pressure, so I'm sure from that point of view, the best thing to do would be to patch the current ET in the VAB and launch with it.

Time for the engineers and managers to have a meeting and decide what to do next?

Jeff

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"They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety"

– B. Franklin, Bartlett's Familiar Quotations (1919)

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