

Film Critique for STS-I07 Launch Engineering Films

Oliu-1, Armando

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From: Oliu-1, Armando [Armando.Oliu-1@nasa.gov]

Sent: Tuesday, January 21, 2003 4:23 PM

To: Robinson, Robbie #VITC; Abell, Chas; Alex, Gus; Bernie Harland; Bill Bender; Brown, Charles; Bud

Wellman; CLOUDT, CHRIS R. (JSC-SN) (HEI); David Brand; Martin David P GM-13 45RMS/RMSF; DISLER, JONATHAN M.; George Jackson; Jill L. Giles; Jim Cain; John Kechele; Kenny Allen; Michael Stone; Mills, Bob; Newland, Glenn; Oliu, Armando; Page, Robert; Rick Wetherington; Rieckhoff, Tom; Rivera, Jorge; Rampley Roger B GS-12 45RMS/RMSF; Sandy Van Hooser;

Sharon Dunn; Speece, Robert; Tim Terry; Tom Joseph; Wolfe-1, Richard; Wright, Robert

Subject: RE: Film Critique for STS-107 Launch Engineering Films

will add a bit to this

Robbie breaks it down to individual camera, but I think things are lost within all that data. On this mission the External Tank lost a significant piece of foam at about 81 seconds after T -0. The debris struck the underside of the left-hand wing of the orbiter. A clear shower of particles can be seen on a couple of films as the debris broke apart. Unfortunately, the one film item that would have given the best data for this (E-208) was out of focus and unusable. As one can imagine we were quite disappointed. The extent of damage on the orbiter is unknown at this point due to poor resolution of film data. I am not sure if E-208 would have given us the information we desire, but we certainly will not know now.

As you know from the past, the films are usually nick-picked to death. Everything from focus, to exposure, to field-of-view is carefully scrutinized every flight. This is done of course because we simply don't have the number of cameras available to afford any problems. The loss of one camera can be, and, is significant. This mission proved that, and then some. Not only did we not have usable data from E-208, but the film from the best camera we have, E-207, was unusable. This is simply unacceptable from an engineering perspective.

I am sure this is coming as an official action from the Launch Director, but for now I will mention it; we need to figure out what happened and why, and then prevent this from happening again. If equipment is getting old, then we need to replace it. If man-power is getting slim, then that needs to be brought forward. If the experience of the workers is a problem, then that needs to come forward. Whatever the problem, it needs to be fixed. We cannot continue to play this roulette with the film data.

Armando Oliu

NASA Ice/Debris Team Kennedy Space Center

321-861-3644

Original Message (**From:** Robbie Robinson [mailto:Robbie.Robinson@vitc.patrick.af.mil]

Sent: Tuesday, January 21, 2003 11:37 AM

To: Abell, Chas; Alex, Gus; Bernie Harland; Bill Bender; Brown, Charles; Bud Wellman; CLOUDT, CHRIS R. (JSC-SN) (HEI); David Brand; David Martin; DISLER, JONATHAN M.; George Jackson; Jill L. Giles; Jim Cain; John Kechele; Kenny Allen; Michael Stone; Mills, Bob; Newland, Glenn; Oliu, Armando; Page, Robert; Rick Wetherington; Rieckhoff, Tom; Rivera, Jorge; Roger Rampley; Sandy Van Hooser; Sharon Dunn; Speece, Robert; Tim Terry; Tom Joseph; Wolfe-1, Richard; Wright, Robert

Subject: Film Critique for STS-107 Launch Engineering Films

Attached is the Film Critique for STS-107 launch Engineering Films:

«**Film ReviewSTS107Ich.doc**»

Robbie Robinson

03/05/2003

Film Critique for STS-IO7 Launch Engineering Films

Photo Planner, Shuttle

Johnson Controls - VITC, 321 853-5387 **JPHO** Console (POCS) -321 861-7266 Email: RQbb~R_QQln\$9_n@:vitg,p~ttiCK.~f.mll

03/05/2003

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