

# Demonstration of Autonomous Rendezvous Technology (DART)

Case Study Transcript

Chris Calfee & Jim Snoddy

Schedule

*Chris Calfee*

Schedule pressure is going to be a part of every project that we do at NASA. It's been a part of every project I've ever worked on, and I expect it will be a part of every project I ever work on at NASA. There was one difference for DART: we had a target spacecraft called MUBLCOM. It was a retired Department of Defense satellite that was basically given to Orbital. It had completed its mission; it obviously had a limited life. The original target launch date was April 2004. That had slipped a little bit, we were in the fall of 2004, and we were worried about MUBLCOM even being there. It was starting to show some signs of not being as cooperative as we thought it was going to be, and we were very concerned about having a target spacecraft. Without that target spacecraft there would be no DART, so sure, there was schedule pressure. We assessed all the risks and we made, at the time, what we thought were solid decisions.

*Jim Snoddy*

One of the major lessons, if you read a lot of them, they always want to talk about the project manager pushing schedule, well you know by definition a project manager always has to push schedule but relative to DART program we actually stood the DART project down for six months to fix all the system engineering and verification issues to get the vehicle right, so it would be correct for the proper flight environment. Even once the vehicle was fixed we had to stand the spacecraft down as a result of the launch vehicle for six months to make sure all the loads and all the integrated analysis was redone because the verification, when the loads were changed on the DART spacecraft about six months prior to launch had to be reanalyzed and the verification paperwork had to be brought up to prove that you were okay to fly.