

Super Lightweight Tank

Case Study Transcript

Brewster Shaw

STS-1: Standard Weight Tank

Brewster Shaw:

We needed 13,000 pounds of performance out of shuttle in order to execute the ISS program, putting it at 51.6 instead of the 28 and a half, you know, and the weight of some of the elements of ISS specifically the big power modules and some of the larger laboratories required and so our goal was 13,000 pounds of performance improvement.

And so we got all kinds of ideas. You know, things like weight reductions on all the orbiters, to burning the OMS engines during ascent, to doing a super light weight tank project, which gave us the largest singular contribution to the performance enhancement.