



MSFC ER24/Propulsion Research & Technology Branch



#### Cryogenic Propellant Storage and Transfer (CPST) Engineering Development Unit (EDU) Multilayer Insulation (MLI) Installation Overview

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# **EDU Configuration Prior to MLI Install**





- Most of the tank Spray-on Foam Insulation (SOFI) was sanded and trimmed prior to MLI blanket installation; some foam closeouts needed to take place on tank top and bottom after MLI was in place.
- Cans at top and bottom supported the tank during MLI installation; struts were installed after the MLI blanket was on the tank.







## **MLI Installation Process Overview**













#### **Layer Integration**





**EYETISPACE** 



#### **Strut Penetrations**









### **60-Layer Blanket Installed on Tank**



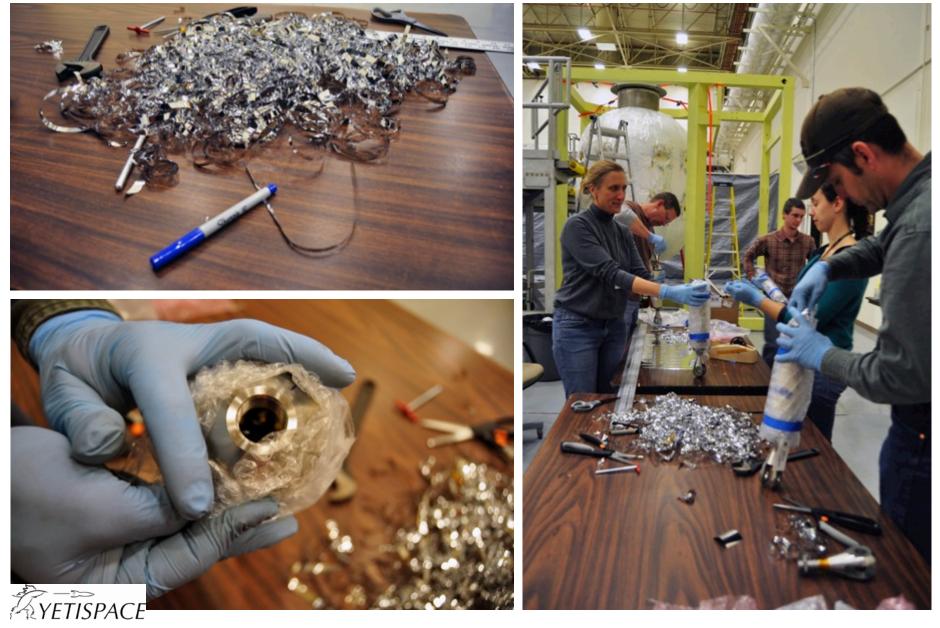






#### **Strut Confetti**







## **Pulling Back MLI Dome Ends**

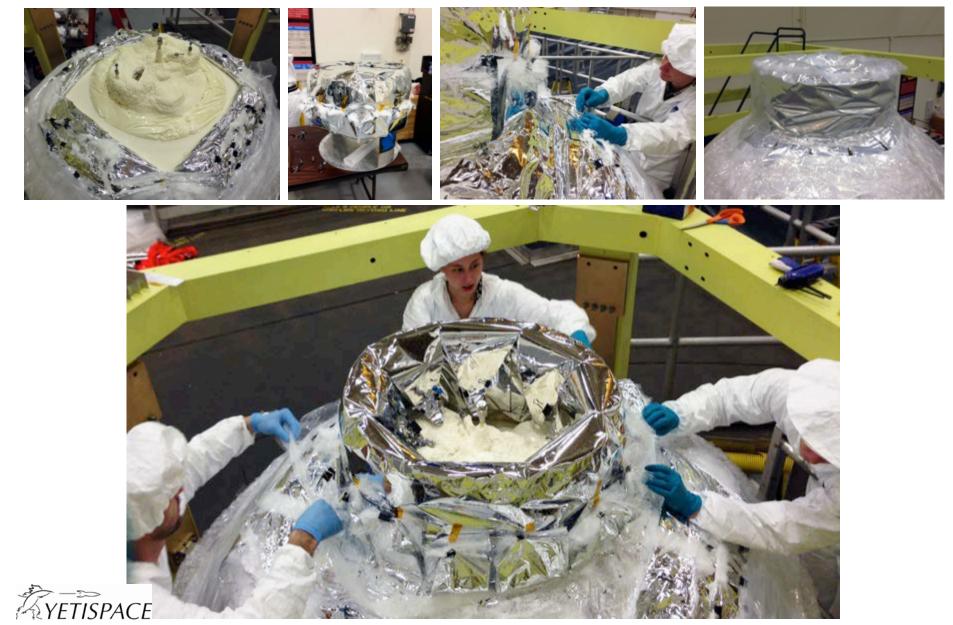






## **MLI Top Hat Installation**

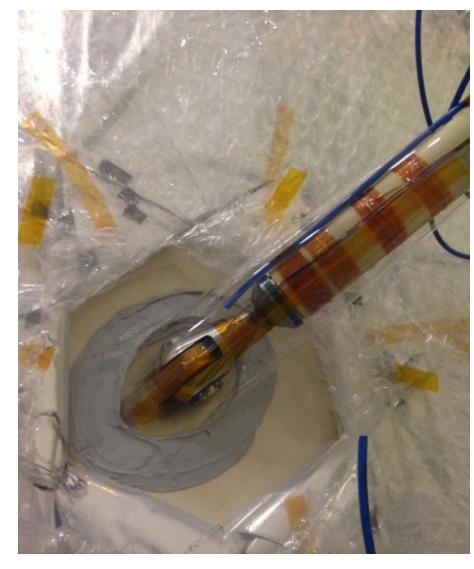






## **Strut Helium Purge Bag Installation**







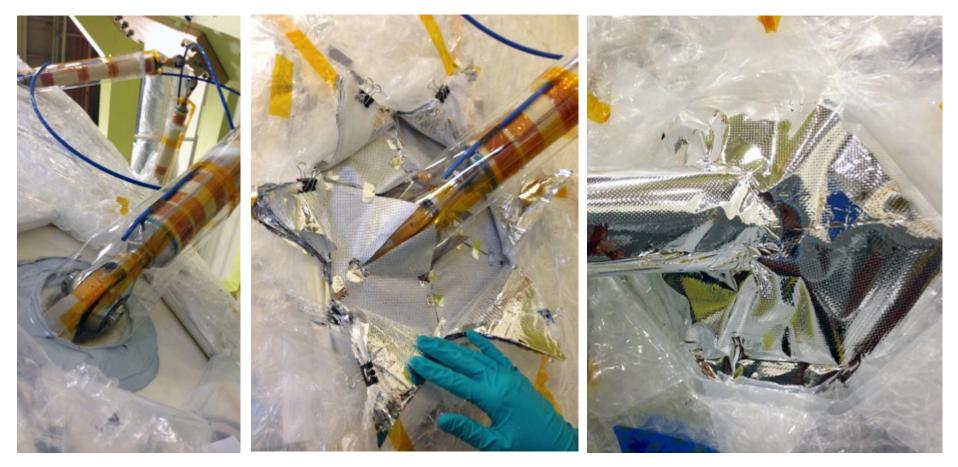




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## **Strut MLI Closeouts**





- MLI blankets were closed out around the struts once the struts and helium purge bags were installed.
- 20 layers of MLI were integrated around the struts.



## **EDU Strut MLI Closeout Team**







### **Preparation for Move to TS300**









#### EDU in TS300 20' VC

