

Building the Coolest X-ray Satellite

Chapter 5 Script

Chapter 5: Packing the XRS and Astro-E2 Launch

Chapter 5, part 1: Packing the XRS for Japan

Video

CLIPS OF PUTTING THE XRS DEWAR IN ITS SHIPPING CONTAINER

Audio

NARRATIVE: It's time. Time to pack up the XRS instrument and ship it to Japan to be assembled onto the ASTRO-E2 spacecraft.

KEVIN: The key point here is to not break anything. We've gotten to the point where we've got no time left. We've got to get it in there and over to Japan in the next couple of days and we don't have time for any mistakes. Everybody's working very hard to get this thing ready to go and out the door in time.

Video

KEVIN OC

CLIPS OF PACKING DRY ICE INTO THE BOX CONTAINING THE XRS DEWAR

Audio

KEVIN: We have to keep the instrument cold during transport and so we have something like 450 pounds of dry ice that they are going to put in this thing. Dry Ice is frozen carbon dioxide. It's a lot colder than regular ice but the key thing is it doesn't melt; it just turns back into CO2 gas. And then we'll scoop most of it out at the other end because that is actually enough to last a lot longer than we think we'll need, again putting in lots of margin, even if things go wrong or something goes funny, we've got plenty.

Video

CLIP OF A TRUCK LEAVING GODDARD

Audio

NARRATIVE: The telescopes and XRS instrument are shipped to Japan. But our story doesn't end here. In Japan, the instruments will be assembled into the ASTRO-E2 spacecraft, where everything will be rigorously tested again.

Chapter 5: Launch and Credits

Video

PHOTO OF ASTRO-E2 TEAM IN JAPAN

TEXT: DATE: JULY 10, 2005; LOCATION: UCHINOURA SPACE CENTER, JAPAN

CLIP OF LAUNCH VIEWING ROOM AT GODDARD

TEXT: DATE: JULY 10, 2005; LOCATION: NASA GODDARD SPACE
FLIGHT CENTER

Audio

NARRATOR: On July 10, 2005, with part of the NASA Astro-E2 team in Japan, those here in the United States anxiously watched an Internet video feed from the launch site.

Video

CLIP OF LAUNCH VIEWING ROOM AT GODDARD

Audio

CROWD: six...five...four...three...two...one...zero
APPLAUSE AND CHEERS

Video

CLIP OF THE ROCKET LAUNCH IN JAPAN
CLIP OF CHEERING IN LAUNCH VIEWING ROOM AT GODDARD
FADE TO BLACK

Video

CREDITS ROLL UP LEFT HALF OF SCREEN
PHOTOS OF CELEBRATION AFTER THE SUCCESSFUL LAUNCH
ANIMATION OF ASTRO-E2 SPACECRAFT IN SPACE

Audio

NARRATOR: Following Japanese tradition, once a spacecraft attains a safe orbit, the spacecraft receives its official Japanese name, a name previously unknown to the mission team. With it successfully in orbit, the Astro-E2 spacecraft is known as "Suzaku."