

0. THE SHUTTLE'S DESIGN FLAW - Story Preface

1. WILBUR AND ORVILLE WRIGHT

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3. LIFT AND DRAG

4. KITTY HAWK

5. THE FIRST FLIGHT

6. FLYER 3 and OTHER FAMOUS FLIGHTS

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10. THE SPACE RACE

11. THE FIRST MAN & WOMAN IN SPACE

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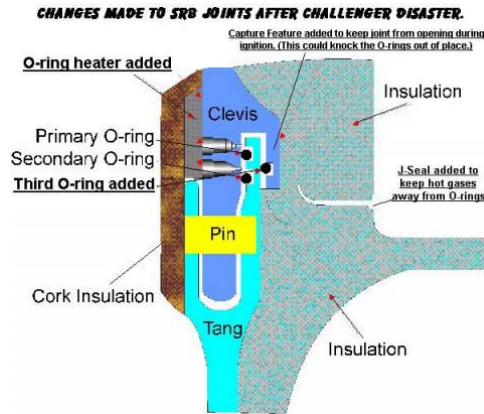
14. DEATH IN THE COMMAND MODULE

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After the *Challenger* explosion, causing all seven crew members to die, NASA redesigned how the solid rocket booster joints were configured. This NASA image depicts the changes.

America's Supersonic Transport Shuttle program was set for its twenty-fifth mission. On board would be a payload specialist whose real job was teaching. Christa McAuliffe would be America's first "teacher in space." Launch was set for January 28, 1986.

Unknown by most people, all of the shuttles had a potentially fatal flaw. Roger Boisjoly knew about that flaw. He did his best to warn both his employer, Morton Thiokol, and NASA. But the people to whom he reported wouldn't listen. And the people who made the ultimate decisions at NASA weren't told.

As a result, *Challenger* and its seven-member crew - including America's first teacher in space - were blown out of the sky seventy-three seconds after launch.

A potential disaster was looming long before that fateful January day. Although NASA completed twenty-four successful shuttle missions before STS 51-L (the official name for the Challenger mission), other flights had experienced lesser versions of the same problem that caused the *Challenger* explosion.

Trouble is, neither the astronauts nor their families knew about it. But the manufacturer of the shuttle's solid rocket booster (SRB) and solid rocket motor (SRM) knew. So did some of the management officials at NASA.

As a result of misjudgments and lack of effective team work, the mission was lost.

Today, the history of flight continues with new planes and ongoing technological advances. Some designers even anticipate planes with circular seating!

See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/THE-SHUTTLE-S-DESIGN-FLAW-History-of-Flight>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/THE-SHUTTLE-S-DESIGN-FLAW-History-of-Flight>



Supersonic Transport Shuttle - Payload Bay Doors

NASA image, online courtesy National Air and Space Museum at the Smithsonian.

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View this asset at:

<http://www.awesomestories.com/asset/view/Supersonic-Transport-Shuttle-Payload-Bay-Doors>



Challenger Crew

NASA Image, online courtesy GRIN (Great Images in NASA).

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Challenger - Blown Out of the Sky

Image online, courtesy NASA.

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View this asset at:

<http://www.awesomestories.com/asset/view/Challenger-Blown-Out-of-the-Sky>

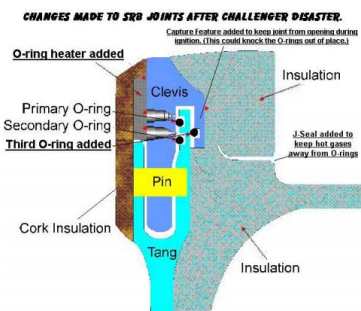


Challenger Mission - STS 51-L

NASA image, online via National Air and Space Museum at the Smithsonian.

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