



▶ Customer Profile

NASA Launched Atlantis on Time Thanks to Solumina

▶ Industry Aerospace and Defense

▶ Customer Situation

NASA's Space Shuttle Atlantis (Mission STS-115) was one of the final shuttle launches before the retirement of the program. As part of NASA's rigorous pre-launch processes, the shuttle had already progressed through horizontal and vertical integration, assembly in the Vehicle Assembly Building (VAB), and was positioned on the launch pad—just days away from its designated launch window.

▶ Challenge

- During final pad preparations, engineers discovered an incorrect bolt installed on the K-band antenna, a critical component for data transmission.
- With the shuttle already on the pad and the launch window approaching, any delay would require:
 - Full defueling of the shuttle
 - Rechecking and safing all systems
 - Rescheduling around satellite traffic and other international missions
- NASA estimated that missing the launch window would result in a \$15 million cost in time, materials, and scheduling delays.

▶ Solution

- Using **Solumina**, technicians were able to:
 - Instantly log the discrepancy and flag it to engineering
 - Initiate and track corrective actions through an integrated platform
 - Collaborate with engineering in real time—accelerating decision-making without breaking process compliance
- The platform eliminated manual paperwork routing and supported fast root cause analysis and resolution approval.

▶ Outcome

- The correct bolt was identified, sourced, and installed in time.
- Atlantis launched successfully within its original launch window.
- NASA avoided a \$15 million delay and demonstrated how Solumina enabled rapid, high-stakes collaboration between engineering and shop floor teams.
- The mission was saved—highlighting Solumina's critical role in supporting complex, time-sensitive aerospace operations.