

## The Project

Blue Origin's commitment to safety defines every step of its processes, from the first package that arrives at the warehouse to the recovery of materials post-launch.

Our SCOPE team's project was to design equipment that would make it possible for technicians to transport heavy, delicate boxes of avionics safely enough to meet Blue Origin's exacting standards. The solution we developed is an elevator cart that can lift and transport up to two boxes of avionics at a time and serve as a workbench during routine testing. This Safe-Avionics-Lifting Lab Equipment (SALLE) streamlines the workflow and prevents injuries. Starting in May 2023, SALLE will be used in Blue's Orbital Launch System warehouse alongside the myriad of other equipment that contributes to Blue Origin's culture of safety.

## Safety

As a team sponsored by Blue Origin, safety was always our first priority. SALLE passed rigorous safety tests, including exposure to extreme load, tilt, and vibration.

## Usability

Safety equipment only works if it is used. We aimed to make using SALLE easier than lifting the avionics by hand so that the technicians have every reason to use it.

## Simplicity

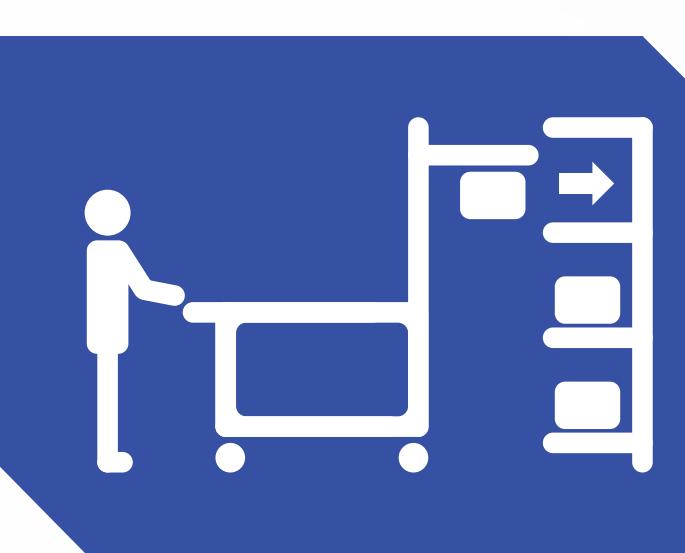
SALLE had to be simple enough for our team to finish building and testing it within two semesters, and easy enough to maintain that it can be used for up to ten years.



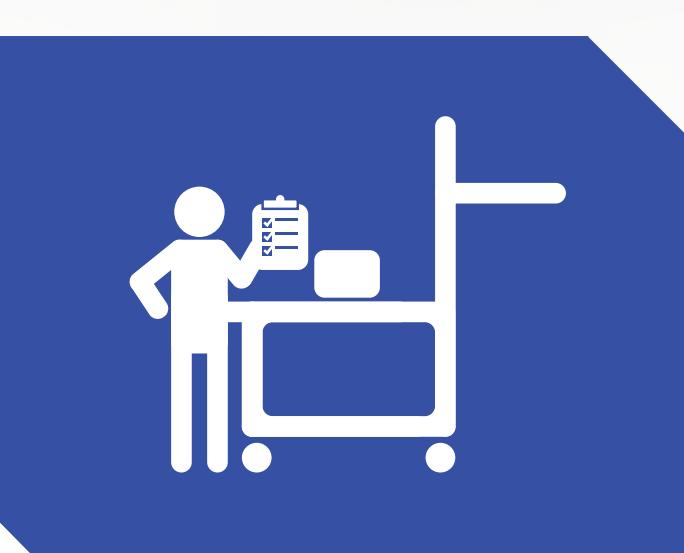
Unpack Avionics



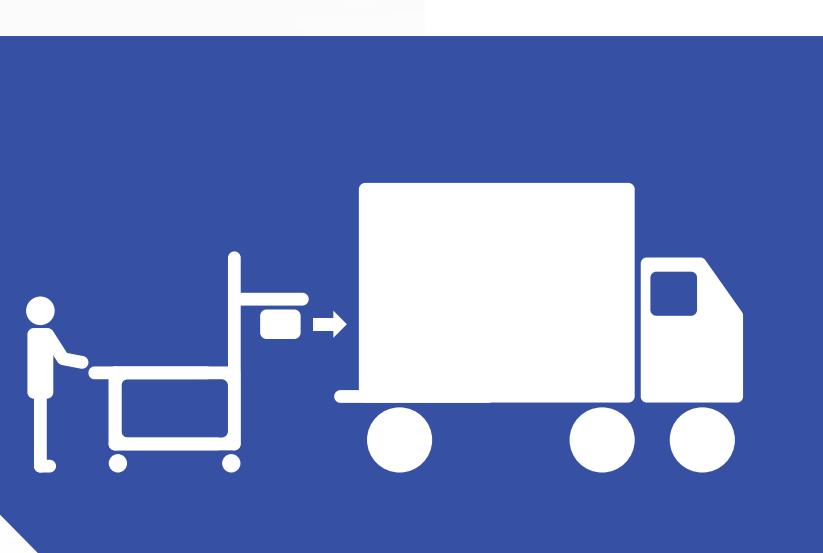
Transport to Testing



Transport to Storage



Periodic Inspection



Transport to Rocket