

### Problem Definition

Modern aerial firefighting aircraft are limited in their ability to suppress wildfires due to the need to land and resupply water. As climate change increasing the frequency and intensity of wildfires, there is a growing need for more advanced and adaptable firefighting solutions.

The Amphibious Firefighting Aircraft is designed to refill directly from nearby lakes or reservoirs, significantly reducing turnaround time and improving efficiency. Its amphibious capabilities enables it to operate from runways, grass airfields, or open water, providing flexibility across a wide range of scenarios. With a high payload capacity, quick servicing, and extended endurance, this aircraft enhances the effectiveness of aerial firefighting efforts.

### Design Calculations & Analysis

### Schematics and Layouts

### Performance and Metrics

### Final Design