THE DEORBITING OF END-OF-LIFE SATELLITES



TO ENSURE THE SAFETY AND SUSTAINABILITY OF SPACE ACTIVITIES IT IS ESSENTIAL TO REMOVE DEBRIS FROM ORBIT TO PREVENT THE PROLIFERATION.

TECHNOLOGY OVERVIEW



Drag sails are ultra-lightweight, deployable structures made of high-surface-area materials designed to increase atmospheric drag on a satellite in low Earth orbit (LEO), thereby accelerating its deorbiting process after end-of-life.

They are: passive systems, deployed autonomously at end-of-mission, useful for CubeSats, smallSats and nonpropulsive satellites.

Market Landscape

Current Market Size: estimated at \$15–30 million.

Forecast to grow to \$150–200 million by 2030, driven by regulatory pressure and small satellite proliferation.

Compound Annual Growth Rate: 30– 35%, due to rapid increase in LEO launches and sustainability mandates.



MAIN PLAYERS

To address this issue several companies are developing advanced technologies to ensure efficient and safe removal of obsolete satelittes.

Some example are: Tethers Unlimited with Terminator Tape; Purdue University + NASA with Spinnaker3 or Vestigo Aerospace with DragNET (licensed from NASA Ames).