News story: Space junk mission deploys from the International Space Station

The RemoveDEBRIS mission, which is led by the University of Surrey, built by the world's leading small satellite manufacturer Surrey Satellite Technology Limited, and has technology on board designed by Airbus, is one of the world's first attempts to address the build-up of dangerous space debris orbiting Earth.

RemoveDebris mission

The RemoveDEBRIS mission will attempt to capture simulated space debris using a net and a harpoon while also testing advanced cameras and radar systems. Once those experiments are complete, it will unfurl a drag sail to bring itself and the debris out of orbit, where it will burn up as it enters the Earth's atmosphere.

The experiment is important as there are thousands of pieces of space debris circulating the planet — many travelling faster than a speeding bullet — posing a risk to valuable satellites and even the International Space Station itself.

Professor Guglielmo Aglietti, Director of the Surrey Space Centre at the University of Surrey and Principal Investigator for the mission, said:

"After almost 5 years of development, it is exciting to finally be in a position where we can test these extremely exciting technologies in the field. If successful, the technologies found in RemoveDEBRIS could be included in other missions in the very near future."

Sir Martin Sweeting, Chief Executive of SSTL, said:

"SSTL's expertise in designing and building low cost, small satellite missions has been fundamental to the success of RemoveDEBRIS, a landmark technology demonstrator for Active Debris Removal missions that will begin a new era of space junk clearance in Earth's orbit."

RemoveDEBRIS was launched on a SpaceX Dragon spacecraft from Florida in April. The project is co-funded by the European Commission.