

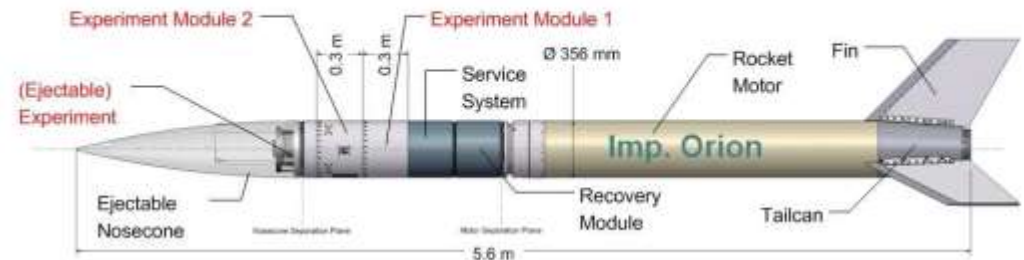
Experiment

A mechanism to deploy and stabilise a space web will be designed and built by students from the University of Glasgow and KTH in Sweden.

Mechanism ejected from nosecone section of REXUS sounding rocket launched from Esrange in 2010.

Experiment objectives are:

- I. Deploy web from spinning central hub using centrifugal forces.
- II. Stabilise web throughout deployment using a reaction wheel.
- III. Accumulate visual and instrument data of deployment and stabilisation.
- IV. Act as a test bed for this deployment and stabilisation method.



History

Space web concept originates from Japanese 'Furoshiki' satellite: a large net held in tension using radial thrusters or through the centrifugal forces of a spinning structure.

Webs acts as lightweight platform for construction of large structures using miniature robots to build as they crawl.

2006 deployment web by the Japanese ended in chaotic deployment sequence due to misalignment of the radial thrusters.

Only successful deployment and spin stabilisation was the Russian Znamya-2 experiment in 1993.