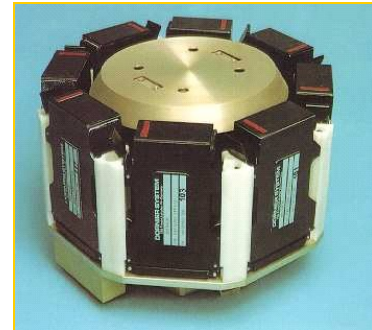


**Astrium to provide centrifuge for gravitational research in space through NanoRacks, LLC for NASA's U.S. National Laboratory on the International Space Station.**

**Astrium and Nanoracks plan to provide a gravitational research platform as part of NASA's U.S. National Laboratory on the International Space Station. The proposed system provides the first commercial access to a centrifuge facility [on the ISS/in Space] for biology and life science experiments.**

**Friedrichshafen - Germany, 27.6.2011 -**

Astrium and Nanoracks plan to outfit a platform for microgravity investigations with a centrifuge for gravitational research. The proposed centrifuge system, based on a standard experiment container system, was developed by Astrium for ESA more than 25 years ago and has been used for more than 120 experiments for various topics.



The joint facility shall allow a continuation of this research and for the first time allow commercial users access to an in orbit centrifuge for 1-g reference and threshold studies.

Experiments from various research topics, mainly in biology and life science can hereby make use of a large inventory of pre-flown designs from previous space missions to shorten the time from a new idea to the execution in orbit to less than 1 year.

The portfolio of pre-flown hardware includes among others, Mini-Aquariums, Seed Germination Boxes, Plant Growth Chambers, Mammalian and Plant Cell Culture Units, and Drosophila Multi-Generation Chambers. The platform offers capabilities for observation and fixation of the samples or specimen.

Experimenters also have access to other Nanoracks laboratory equipment already in orbit. NanoRacks currently operates two platforms I within the ISS U.S. National Lab and has announced plans to launch an array of additional facilities, including a Plate Reader for microbiological analysis in 2012, further enhancing the experimental capabilities for biological and life science research.

The facility shall be operated under Nanoracks' Space Act Agreement with NASA as part of NASA's U.S. National Laboratory on the International Space Station.

#### **About Nanoracks**

NanoRacks LLC was formed in 2009 to provide quality hardware and services for the U.S. National Laboratory onboard the International Space Station. The Company has two research platforms onboard the U.S. National Laboratory which can house plug and play payloads using the CubeSat form factor. The current signed customer pipeline of over 50 payloads including domestic and international educational institutions, research organizations and government organizations, has propelled NanoRacks into a leadership position in understanding the emerging commercial market for low-earth orbit utilization. Visit us at [www.nanoracks.com](http://www.nanoracks.com) and follow us at [@nanoracks](https://twitter.com/nanoracks).

#### **About Astrium**

Astrium, a wholly owned subsidiary of EADS, is dedicated to providing civil and defence space systems and services. In 2008, Astrium had a turnover of €4.3 billion and more than 15,000 employees in France, Germany, the United Kingdom, Spain and the Netherlands. Its three main

areas of activity are Astrium Satellites for spacecraft and ground segment, Astrium Services for the development and delivery of satellite services and Astrium Space Transportation for launchers and orbital infrastructure.