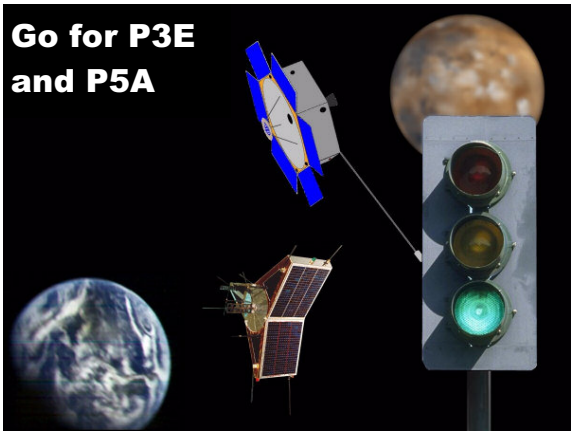
AMSAT-DL announces formal go-ahead for space missions "Phase 3-E" and "Phase 5-A"



In July 2002 the AMSAT-DL (Germany) board of directors gave its official green light to develop and build the two spacecrafts AMSAT-Phase 3-E (P3E) and AMSAT-Phase 5-A (P5A). The high acceptance of the mission goals of these two projects expressed in the recent AMSAT-DL member's survey was the final element to arrive at this decision. Both satellites will be created in a common development process by an international team under the leadership of AMSAT-DL. The P3E satellite is to be launched as communication and scientific platform into a highly elliptical orbit around Earth. The second project with the working name "AMSAT-Phase 5-A" is destined to enter an orbit around the planet Mars. This spacecraft will then transmit scientific data to Earth - data from experiments on-board P5A as well as - via its repeater function - from experiments on the Martian surface or the planet's atmosphere.

So far three successful Phase 3 satellites were launched under the leadership of AMSAT-DL. The latest satellite of this series, P3D (now operational as AMSAT-OSCAR 40), was launched in 2000 and demonstrated sufficient bus and propulsion capabilities for a flight to Mars. So AMSAT-DL started a closer investigation into the possibility of such a mission. Based on the existing experience base and the overwhelming interest during the AMSAT-DL International Satellite-Workshop last year, the P5A spacecraft will not only carry scientific experiments, but also subpayloads to be released in direction to the Martian surface. Suitable launch windows to Mars exist in the years 2007 and 2009.

Two or three years earlier P3-E to be launched in an orbit around Earth is expected to continue the successful series of AMSAT-Phase 3 satellites. The main task of P3E is to serve as communication platform for the nearly 2 million radio amateurs worldwide. They constitute a network for further exploration of the so called "uncoordinated multiple access", to provide simultaneous and freely available service to a large number of groundstations. Using existing technology and implementing the results of the member's survey, several transponders on frequencies between 145 MHz and 10 GHz are planned for P3E. Details will be fixed in a design and payload meeting in the second half of 2002. Additionally the P3-E spacecraft will be an important test bed for some technology needed for the Mars mission. Work on the P3-bus has been started and a number of modules are already under construction.

So far all AMSAT-DL satellite missions in 1980, 83, 88 and 2000 were launched with ARIANE-launchers from French Guyana into geostationary transfer orbits. The excellent co-operation between Arianespace (with its current ARIANE-5-launch-system) and AMSAT-DL resulted in the development of various arrangements for the launch of secondary payloads on-board of ARIANE-launches. Thus Arianespace will be the first obvious choice for the launches of P3E and P5A.

Peter Gülzow, DB2OS
President AMSAT-DL

Frank Sperber, DL6DBN
Vice President

Prof. Dr. Karl Meinzer, DJ4ZC
Projectleader

First background information about both missions can be found at:

www.amsat-dl.org/p3e/towards-p3e.pdf
www.amsat-dl.org/p5a/p5a-to-mars.pdf