

Unmanned Systems Manufacturers Association of the Czech Republic (AVBS)



Since its establishment in 2006, the Unmanned Systems Manufacturers Association concentrates at the communication between industry active in UAS area and potential unmanned vehicles users. The main goal is to put through the idea of UAS usage as a standard working instrument for wide range usage with the same quality as currently piloted services and open a completely new portfolio of services provided only by UAS.

The main tasks of our association are:

- Actively participate on the establishment of legislative framework for development, manufacturing and operation of the UAS.
- Try to receive an empowering of association for national management of the UAS in sense of Civil Aviation Act.
- Support and evolve unmanned vehicle research and development.
- Represent and coordinate the actions of individual members.
- Defend members' economic interests.
- Look after promotion and education development.

The key activity in 2007 has been the participation in the working groups by national Civil Aviation Authority and Czech Ministry of Transport by conception of the legislative framework for UAS operations with MTOW below 150 kg.

This concept of the supplement to Civil Aviation Act is focused at the UAS operations in visible line-of-sight range and in areas without other air traffic. It defines the UAV applications for commercial, experimental and research activities.

The basic structuring of the concept is made based on maximum take-off weight:

- up to 7 kg
- between 7 and 20 kg
- between 20 and 150 kg

There are defined requirements for registration, operator's qualification, application etc. for these categories. This concept is currently prepared for standard legislative procedures.

AVBS is the guarantor of the Czech Technical University conference, which will be dedicated to unmanned aircraft systems and will be held in Prague in 2008.

This year AVBS continues to prepare the nationwide project utilizing unmanned aerial vehicles to be used in Czech Integrated Rescue System and other governmental organization as well as in commercial area. In 2007 requirements from potential users have been collected and will lead into the general system definition during this year.

Members of the Association

VTULaPVO

The Military and Technical Institute of Aviation and Air Defence as the coordinator of the research, development, and implementation of military avionic and air defence technologies focuses on applied research and development, testing, logistic support, and verification activities. VTULaPVO is a manufacturer of an unmanned aerial vehicle called «Sojka» and it is currently developing another unmanned flying vehicle called «Manta».



Manta - VTULaPVO, Czech Rep.

Honeywell

Honeywell is a traditional worldwide manufacturer of avionics. Its portfolio also includes an unmanned vehicle called the Honeywell MAV (Micro Air Vehicle) that was developed for the US ARMY. The EU Honeywell operates a research and development centre which is located in the Czech Republic. Within the Advanced Technology group, a team works that focuses on the development of technologies that allow for the integration of the UAS into civil airspace – Sense & Avoid, Fault Tolerant Control, Communications, Auto-land, etc. The group concentrates on the integration of the relevant sensors, modelling and testing flight parameters and developing associated SW – GN&C algorithms, Reconfigurable Flight Controls algorithms, Collision Avoidance algorithms, and the like. Honeywell monitors the actions taken by the work group EUROCAE WG-73, of which it is a member.

TL elektronik

TL elektronik is a world leader in the development and manufacturing of digital aerospace instruments and equipment and it has extensive know-how. TL elektronik is fully approved to design and manufacture civil and military aviation products and to verify civil aviation products. Currently, TL elektronik is developing an automatic supply parachute called «AMPAD». This technological demonstrator of avionics, incl. DSA systems, and a motorized driving unit that is powered by a hydrogen fuel cell, should become the basis for future UA.

Delong Instruments

Delong Instruments is a company that primarily specializes in mechatronics and avionics systems for UA control. Long-standing experience especially with the «Sojka» unmanned vehicle stands this company amongst the most important UAS players.

Asociace Vyrobcu Bezpilotnich Systemu AVBS

Mladoboleslavska 944

197 21 Prague, Czech Republic

Tel.: (+420) 255 708 771

Fax: (+420) 255 708 725

info@avbs.cz

www.avbs.cz