Activities Report 2013-2014

This reports presents a brief summary of the main activities developed by AvionTek in the past two years regarding the company's main products.

More Information at the website www.aviontek.com.

3D-Pilot - 3D navigation aid tool with synthetic view

(www.3d-pilot.com)

3D-Pilot is a low-cost product (h/w & s/w) developed as add-on navigational assistance for pilots of small-medium aircrafts landing on small-medium air fields.

The "3D-Pilot" product is a high-precision 3D satellite-based, low-cost navigation aid offering 2D+3D General Aviation navigation via moving mapping & 3D tunnel functionalities, based on real-time calculations & advanced synthetic vision close to real vision.

There are three versions of the 3DPilot product:

a. 3D-Pilot "PLUS" - a certified high end product for integration in General Aviation aircraft and helicopters
b. 3D-Pilot "STANDARD" - a non-certified mobile embedded unit for GA aircraft and helicopters, as well as for Light Sport Aircraft (LSA)
c. 3D-Pilot "TABLET" - a software and database for mobile Tablet with similar functionalities

3D-Pilot™ Tablet

Standard

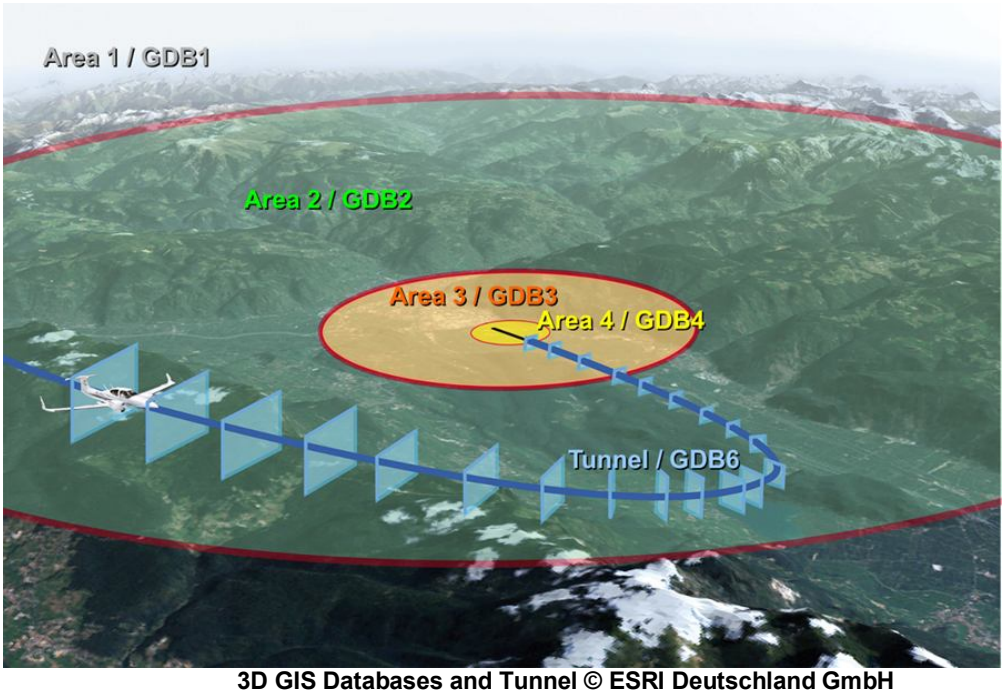
The system offers near auto-landing rendering via tunnel & tunnel guidance technology. It is sold at a low introductory price.

- Excellent price/performance balance
- Flexible hardware & software (mobile unit)
- High Resolution 3D Database
- Real-time rendering and visualization SW for synthetic vision and augmented reality vision
- S/w generated approach tunnels for 2000+ European aerodromes
- Production for the Global Market envisioned
- Flight recording for customized tunnel creation
- Certifiable hardware, software, and 3D GIS data
- Multiple features
- Low cost

In 2014 a cooperation with Becker Avionics GmbH; Germany one of the world's leading company for General Aviation avionics devices was started.

3D Aerodromes - 3-Dimensional Airport & Vicinity Geo-Database

(www.3d-aerodromes.com)



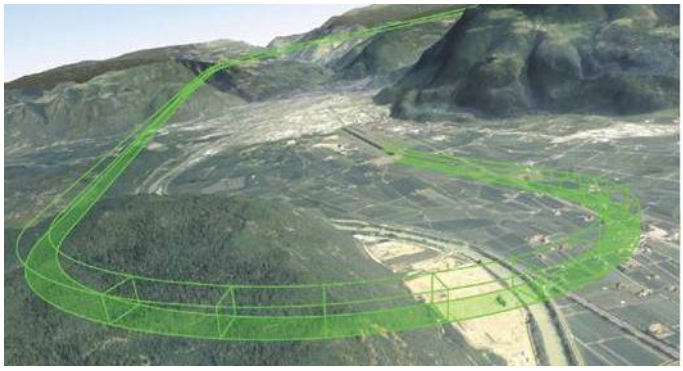
3D GIS Databases and Tunnel © ESRI Deutschland GmbH

3D-Aerodromes created a worldwide 3D Geodatabase for Airports. It serves applications for airports, ATCs, pilots, cockpit instrumentation, navigation & multiple other purposes, including virtual 3D presentations of the airport on the Internet. A typical 3D-Aerodromes database covers the major region, the airport environment, airport buildings, obstacles, nav-aids, waypoints and procedures, airspace and its classification, and additional

attributes. The database is compiled from satellite data, high-resolution terrain data, airport information (e.g., CAD data), orthophotos & other datasets used to compile a realistic representation of the actual airport.

The 3D-Aerodromes database is created through a s/w product for production of 3D geo- and navigation data of aerodromes databases using a defined workflow with specialized s/w tools. Users of this s/w are enabled to produce such 3D geo- and navigation databases based on almost automatized processing steps in an effective and efficient manner, and perform quality assurance on the resulting data products.

The database is available for 470 German and 50 EU Aerodromes at very high resolution.



In 2013 and 2014 avionTek continued the development of the databases (GBD4) of more European airports; Tunnels (GDB6) and airport buildings were improved for the existing airports; Better digital elevation data was integrated into the 3D pilot GIS data base (GDB1, GDB2) improving the following functions of 3D-Pilot:

- Terrain / Obstacle Avoidance - a safe distance between aircraft and ground
- Synthetic vision - high level of safety in all weather conditions over any terrain
- Flight Simulation with realistic 3D data

AirScout – Integration of 3D-Pilot into BECKER-AVIONICS navigators

The above mentioned cooperation with Becker Avionics includes the porting of the 3D-Pilot software to the Becker specific hardware, the navigation system MFD6203 called “AirScout”.

The porting also includes the integration of a regular update of the Jeppesen provided ARINC 424 database and implementation of the required security methodology to provide integrity of the data on the final product as well as provisions to prohibit unauthorized copying of the data. Also the AirScout user’s manual was produced.

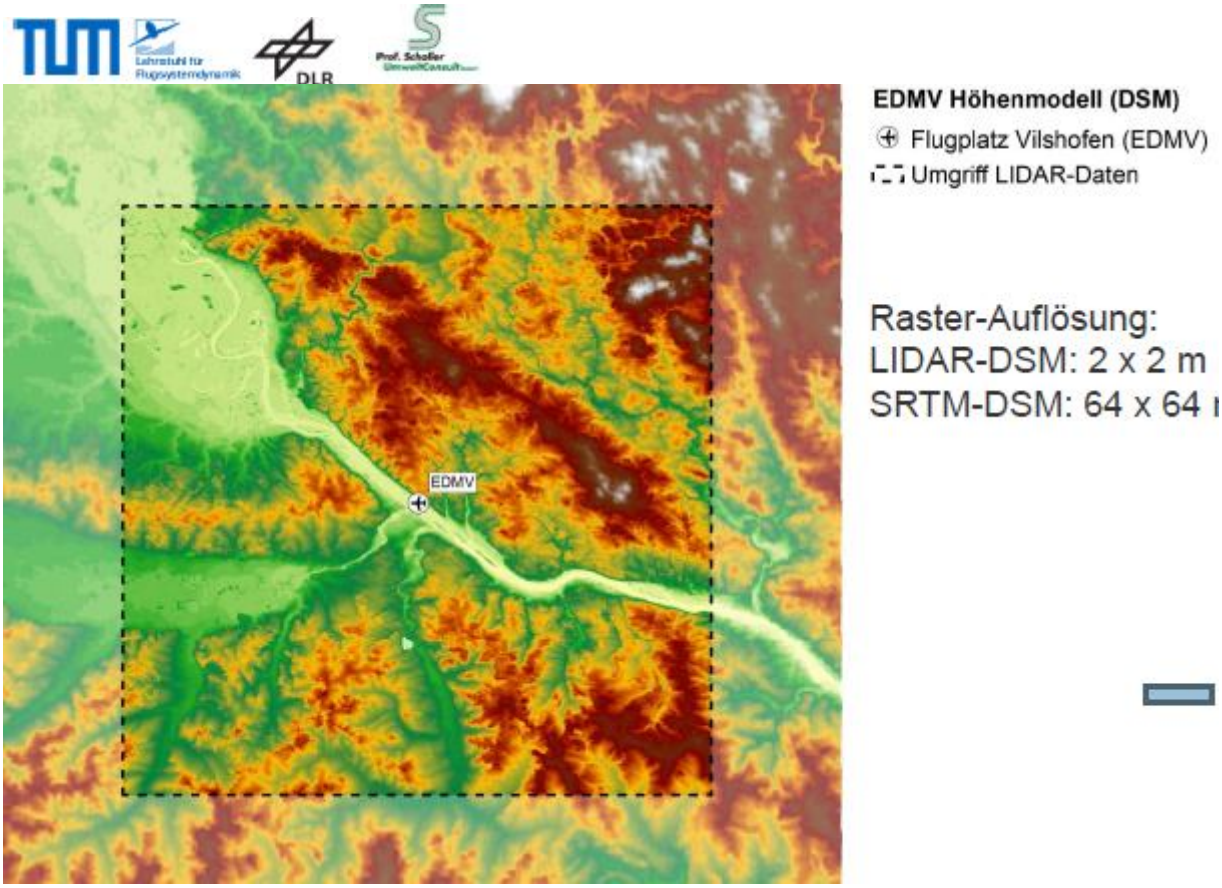
The first version for sales to end customer will be released in March 2015.

Innovative Nutzung von Satellitennavigation und Geländeinformationen (INSAG) – Innovative Usage of Satellite Navigatioin and Terraininformation

Together with TUM, PSU; RUAG and DLR a 3D –GIS database creation tool has been developed to produce navigational databases to be used for automated landing of UAVs at two test airports in Southern Germany (EDMO and EDMV).

The database contains DSM high resolution terrain data of these test airports in combination of obstacle free 3D trajectories for navigation using EGNOS and GALLILEO satellite position data.

The terrain and Orthophoto data had been collected with a full sensor equipped UAV:



Geländemodelle der Flugplatzumgebungen

Höhenmodell Vilshofen (EDMV) – 3D-Ansicht