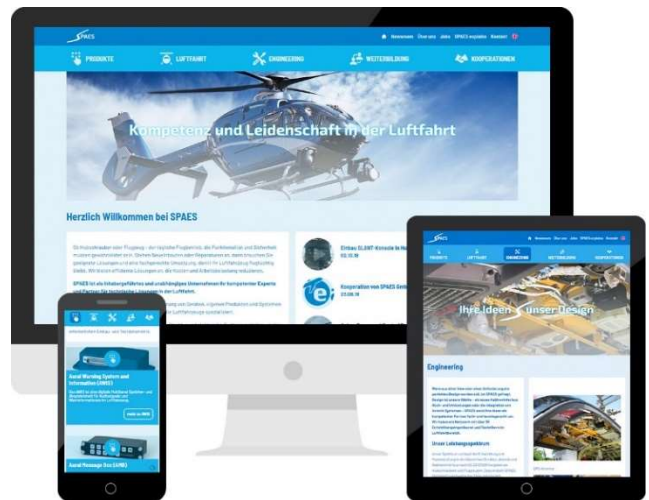


## Relaunch of SPAES homepage

The SPAES website is now completely redesigned. The new online presence [www.spaes.de](http://www.spaes.de) shows a new and modern design with better user-friendliness. The visitors receive more information on the range of services. A newsroom shows the company activities on the different communication platforms.

The new internet presence shows more information on the service range like products, aviation, engineering, training and cooperations. The new design with pictures, icons and comprehensible texts supports the user friendly handling. With the responsive design the new homepage can be used on mobile devices as well as on desktop computers. The visitor has the best possible representation of information on the screen.



## Production of additional adapter plates for optimized operation in air rescue for helicopter 365 Dauphin

For optimized operation in air rescue, SPAES GmbH & Co. KG delivered two more adapter plates for integration of medical seat on Airbus AS365 Dauphin helicopters.

The adapter plate facilitate the mounting of optional two medical backpacks and an ECMO bracket. "The STC increases not only the flexibility of medical operations, but also offers more space for the crew. The adapter plate can be used for all variants of AS 365 Dauphin, said Joachim Schanz, CEO SPAES.

For production of the adapter plate, first the single parts are manufactured. And after that the surface treatment followed by the installation on the helicopter. A STC for the adapter plates is already available.

## SPAES offers technical solutions for aviation and supports customers with technical staff for project realization

SPAES GmbH & Co. KG supports customers with technical staff to guarantee an optimal change or repair in the aircraft. "For project realization we have provided one of our customers with an avionic technician for cable harness production", said Joachim Schanz, CEO SPAES.

"According to our network of experienced and competent personnel we can offer our customers a smooth workflow. In case the customer has lack of personnel for installation or modification, SPAES supports the customer with avionic technicians and design-engineers for project realization."





## Installation of Spidertracks S 3 in helicopter BK 117

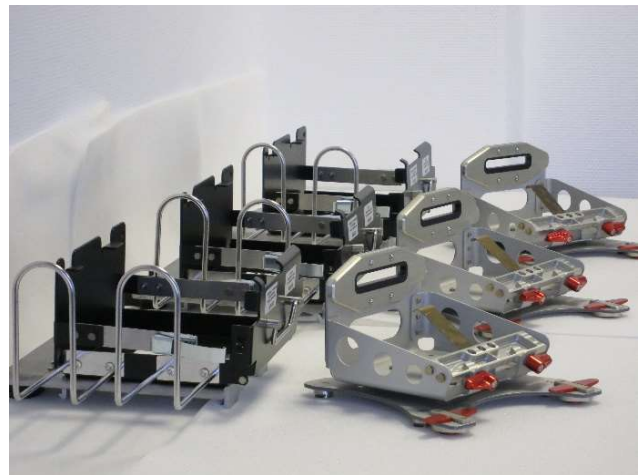
SPAES, with a customer, installed spidertracks on the instrument panel of helicopter BK 117. With the support of the system flight, paths can be tracked worldwide via internet in real time. "For the installation of the system, cables were routed. The spider can be mounted variably in the cockpit", said Joachim Kies, Head of Operational Business SPAES.

The portable device has an antenna, can be used immediately and transmits during the flight GPS position data, information data to height and speed as well as the direction by the Iridium satellite network to a server. Data transmitting starts automatically with power supply. The helicopter, equipped with the tracking-system, is used for operation in regions in which data transmission is only possible by satellite transfer. A minor change has been created in the EASA Part 21J design organization of SPAES.

## Installation of medical racks for ventilator Oxylog 3000 and infusion pump Braun Perfusor Compacts S in helicopter EC 135

For a customer in the field of air rescue SPAES procured and certified nine medical racks suitable for ventilators Dräger Oxylog 3000 and 3000 plus or Hamilton T1 in EC 135. The racks for the ventilator are mounted on the track system at the ceiling of the helicopter and can be rotated by 360 degrees. This allows control and operation from all positions in the passenger compartment.

Furthermore nine double brackets suitable for infusion pump Braun Perfusor® compact S were mounted. The medical racks are integrated by a rail system. SPAES adapted the standard brackets to aviation standard. With an adapter plate the customer specific distance for installation was realized with four Dräger claws. "The first six medical racks were delivered to the customer", said Joachim Kies, Head of Operational Business SPAES. "The remaining twelve brackets will follow with the modification of the helicopter", adds Kies. For installation the minor change has been created.



## Installation of AIR TRAFFIC FLARM and ADS-B Traffic Sensor in helicopter AS 350 / EC 130 for better air traffic control

SPAES installed with a customer a collision warning system for better air traffic control in the helicopters AS 350 / EC 130. The collision warning system sends and receives FLARM data by PowerFLARM technology. Furthermore the system receives ADS-B data and signals from Mode-S transponders and allows a visual presentation of aircrafts on a display. The flexible interface design allows a seamless integration in the cockpit. AIR TRAFFIC receives FLARM data and sends GPS- and traffic data to all compatible receiver and display systems. Additionally ADS-B data and Mode-S traffic information are

processed. "The system is small and does not need much power. The AIR Traffic was covered installed as remote system and is connected with the power supply. The AIR TRAFFIC display can also be mounted as compact unit in the cockpit panel. The versatile application and the variable installation of AIR Traffic allows an integration in a wide range of aircrafts", says Joachim Schanz, CEO SPAES. For installation, SPAES created a minor change in the EASA Part J21 design organization and prepared the required compliance documents.