

## Installation of Power and Control Box for external load operation on helicopter Bell 204/205

SPAES in cooperation with Wucher Helicopter, installed a power and control box for use of long line load hooks and further systems for external load operation on Bell 204/205. The power and control box is mounted at the lower fuselage of the helicopter and supplies the external load cable with power to release and close the load hook. The load hook is activated with a pushbutton installed on pilot stick and opens or closes for lifting or dropping the load. In case of Bambi-bucket type, the control box opens or closes this bucket, which enables a controlled firefighting. SPAES applied for the Supplement Type Certificate (STC) at the European Aviation Safety Agency (EASA) and implemented this major change in its Part 21J design organization. The installation of the power and control box was implemented in the maintenance center of Wucher Helicopter in Ludesch, Austria. For STC approval, SPAES prepared the installation documents and performed the necessary tests in cooperation with the customer. The EASA approved the STC after competition of the test and verification of compliance.



## Training for Head of Office of Airworthiness Part 21J

Because of the change in personnel in leading position in an EASA Part 21J design organization, SPAES conducted a training program for the head of office of airworthiness. In two-day training program, the trainer and consultant, Joachim Schanz from SPAES explained the participants about the specific paragraphs of Part 21. And also the tasks and responsibilities of head of office of airworthiness were discussed in the training. With examples, he illustrated the process flow of a compliance verification. The second part of the training was focused on additional EASA material and accompanying materials of CS29 Certification Specifications for large helicopters.

## Installation of AD-ELT on Airbus AS355 and AS350 helicopters

According to the new requirements of the European Aviation Safety Agency (EASA) for offshore operation, SPAES collaborated with KMN for the installation of an automatic deployable Emergency Locator Transmitter (AD-ELT) on the lower fuselage of the airframe of Airbus helicopters AS355 and AS350. In case of rigid impact or if water flows in the helicopter, the AD-ELT swims on water and transmits the location. Furthermore the system has a water and acceleration sensor for automatic deployment of AD-ELT. The modification of the system was realized in the maintenance organization of KMN.



An EASA Supplement Type Certificate (STC) was implemented for the installation. SPAES designed the required installation and test documents. The verification tests were performed on-site with the customer.

## New seat covers for Airbus H145 and EC135 helicopters

For the offshore operation, SPAES with Intercopter upholstered the seats of Airbus helicopters H145 und EC135. The requested leather, the carpet and the corresponding material were chosen by the customer in advance. The new cover was installed together with an aircraft saddler. The existing covers served as templates for the new ones. Upon completion the installation on the helicopter was performed by EASA Part 145 maintenance organization. For fire-safety verification and the safe installation of the new cover, SPAES issued a Minor Change for each helicopter types, H145 and EC135.



## Installation of Sound Proofing System in Airbus AS332 helicopter

SPAES with Heli Austria, installed a Sound Proofing System for noise reduction in Airbus helicopter AS332. The applied and aviation-examined material complies strictly to the requirements and test specifications for flammability.

An aviation saddler was used for sewing the materials. The different parts were fixed with Velcro strip so that the interior of the helicopter was covered with the material.

“We prepared the requested installation documents as well as the compliance verification documents“, explained Joachim Schanz, CEO SPAES.



## Reorder of adapter plate for Airbus AS365 Dauphin

For optimized operation of an air rescue, SPAES successfully installed an adapter plate for integration of medical seat on helicopter Airbus AS365 Dauphin. 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. “The customer ordered later two more adapter plates“, added Schanz.

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.

