

DATE: March 19th, 2020

No.: AIRW/2020/07

**To:** All AW139 and AW169 AgustaWestland helicopters Owners/Operators /Service Centres

**SUBJECT:** AW139 and AW169 ISOARK N 36-4 biocontainment isolation system installation – technical evaluation.

Leonardo Helicopter, with refers to ongoing SARS-CoV-2 emergency, provides this letter in order to support all HEMS helicopter operators that will perform emergency air transportation with patients that require biocontainment isolation system installed on AW139 and AW169. This letter is to support helicopter operator's proper risk assessment in accordance to EU 2018/1139 art.71 exemption provisions and NAAs.

Leonardo Helicopter evaluated the installation of one single ISOARK N 36-4 biocontainment isolation system in cabin equipped with EMS KIT P/N 139172-501 / -502 on AW139 and EMS Aerolite STC FLIGHT MANUAL SUPPLEMENT FMS-169-0040200-501 and AW169 RFM SUPPLEMENT 40 Stretcher Installation Layout on AW169, the installation is compatible with transport operations provided that:

- A specific installation trial Stretcher with the biocontainment system installed is positively executed with regards to the following evidences:
  - ISOARK N 36-4 biocontainment isolation system is installed in accordance with the prescriptions specified by the Manufacturer.
  - The cabin insulation is made by means of metallic tape or equivalent suitable means on all the perimeter of the cabin/cockpit separation wall (both rigid and soft) on all Hinges and Zippers and in general all gaps and apertures. The material of the separation walls (both rigid and soft) are considered water-repellent.

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- If Kit Heating is installed on the helicopter it can be OFF. In this case all cabin ducts shall be closed with metallic tape or equivalent. If the kit Heating is requested to be ON, it shall be left ON for all the flight.
  - Access to Exit Cabin Doors Handles is ensured on both sides.
  - Emergency EXIT are accessible by operators and relevant indications are visible.
  - Cabin portable Fire Extinguishers accessibility is confirmed by at least one crew member.
  - Before any mission ISOARK N 36-4 biocontainment isolation system shall be installed on helicopter with battery charged. In case the helicopter have appropriate power outlet and is requested to plug the system, please verify the Electrical Load Analysis, specific for each single helicopter configuration to verify the compatibility of the additional power consumption. If necessary contact Leonardo Customer Support.
- When installed on the helicopter, each single biocontainment isolation system shall be tested through EMC compatibility check in accordance to the applicable procedure ( e.g. AMP-39-A-00-80-00-06A-369A-A), to verify that the additional equipment when powered up do not interfere with basic aircraft electrical and avionics systems.

The operations are authorized with the following flight limitations with the biocontainment system installed on the stretcher:

- Avoid severe turbulence and harsh maneuvers.

#### Operative limitations

- With reference weight and balance calculation please consider the Stretcher including both the patient and the biocontainment system please refer to the proper RFM applicable limitations (ref. RFM FMS 08-008 for AW139 and ref. RFM STC FLIGHT MANUAL SUPPLEMENT FMS-169-0040200-501 and AW169 RFM SUPPLEMENT 40 Stretcher Installation Layout for AW169).
- The cabin temperature range shall be guarantee between 0°C – 45 °C in accordance to biocontainment system Operative Manual.
- Before the installation of biocontainment isolation system with a patient it is necessary to activate the ECS/Ventilation system in the cabin and keep it ON for all the duration of the mission. As soon as the patient is disembarked, perform cleaning procedure keeping ON the ECS/Ventilation System.

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## Operative Recommendations

Referring to the ongoing SARS-CoV-2 outbreak, and in accordance to EASA SD-2020-01, EASA SD-2020-02, Leonardo Helicopters states that the Cleaning procedures of the cabin after a biocontainment isolation mission can be performed in accordance to the LHD SIL GEN-20-082 and LHD SIL GEN-20-084.

## Other References

Please refer to ISOARK N 36-4 Tech publication for installation and maintenance tasks.

## Best Regards



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