

ABSTRACT

“SAR Autopilot Modes Certification”

The approval of Search and Rescue Autopilot modes (SAR) requires the Certification Authorities to establish dedicated rules as these modes are not considered in the current codes. SAR autopilot modes approval is therefore based on an EASA Special Condition that has been developed when the first program has been proposed for approval.

This presentation focuses on the basic assumptions made by the certification authorities while establishing the SAR modes Special Condition and on the main safety features that are required for implementing SAR modes on current autopilots. The level of integrity required to the system to comply with the assigned safety objectives is also briefly discussed.

Finally, a typical investigation program is presented with the most common points of investigation.

The experience acquired by ENAC Flight Test Team with the recent approval of SAR modes for the AW139 helicopter is used as a background for presenting the topics.