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DIPARTIMENTO DI
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PBN Improvement of Reliability and Availability of Hems Operations

Arrigo Avi

Abstract

PAT NUCLEO ELICOTTERI VVF is a small helicopter company inside firefighting and civil protection service, entitled by local government to ensure HEMS capability in entire territory administrated.

Service is performed by two AW139 and one AS365N3, plus two AS350B3 for aerial work only. Typical local orography makes HEMS missions very demanding. In particular mountains and tight valleys could introduce an high risk level to guarantee HEMS capabilities through 24H. In every valleys there is at least one HEMS helipad for night operations, managed by Società Aeroporto Caproni (local airport public company) flyable only with VFR rules due to lack of navigational aid. In order to improve availability of HEMS service, SOCIETÀ AEROPORTO CAPRONI Spa in conjunction with PAT NUCLEO ELICOTTERI VVF won a GSA call for the development of new PBN route and to upgrade the avionics of the two AW139 to exploit it. Our project aims to demonstrate the power of PBN navigation with satellite navigation for improvement of reliability and availability of HEMS service through mountain areas with GSA procurement funding mechanism.

Sito Web DAER: <http://www.aero.polimi.it>

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Sala Consiglio, 2nd Floor, Building B12, Campus Bovisa
Dip. di Scienze e Tecnologie Aerospaziali
Via La Masa, 34 - 20156 Milano