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SESSION: **SAFETY**

TITLE: **VERIFICATION AND CERTIFICATION OF FLIGHT INSPECTION SYSTEMS**

ABSTRACT: After development and prior routine operation flight inspection systems encounter two kinds of certification in the initial phase. On one hand the compliance of each unit according to airworthiness rules needs to be proven in detail. On the other hand the accuracy and reliability of the system needs to be verified.

Airworthiness is certified with EASA or FAA STC or according to national requirements, while accuracy and reliability is performed according to ICAO regulations, or according to the regulations of each dedicated country. Both tasks require tremendous efforts.

The airworthiness certification of the equipment is meanwhile somehow manageable. This is accomplished either through experiences or through consulting aircraft designer, which are familiar with such procedures.

The second harder duty is to prove the accuracy and reliability of the system and to bring this evidence to paper for the regulating agency. This presentation is focusing on this exercise and examines possibilities to achieve comparable standards for the accuracy of flight inspection systems. Everybody is aware, that such precision confirmations often resulting in arguments in a grey zone, in which it should not be looked into detail. This exposure is highlighting the difficulties and showing options to achieving a general standard. It compares verifications and examinations of systems and is discussing each individual challenge.