

# WIRELESS TECHNOLOGIES TO BE USE FOR MEASUREMENT OF WING AERODYNAMIC CHARACTERISTICS

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**Abstract:** Measurement information system (MIS) is designed for performing measurements of wing aerodynamic characteristics. MIS consists of wireless sensors network (WSN) and a measurement processing device. The measurements of aerodynamic characteristics are usually performed in the wind tunnel where MIS is equipped. In particular cases it is purposeful to perform measurements during real flight that makes some difficulties in MIS integration into an aircraft.

Present paper describes a method for measurement of wing aerodynamic characteristics during flight. For this purpose MIS is designed with on-board integrated wireless sensors. For this WSN not licensed 2.4 GHz frequency band IEEE 802.15.4 standard is used. Application of wireless sensors enables a person (who measures) to flexibly adapt to the particular measurement environment and to perform measurements of aerodynamic characteristics for a chosen part of an wing.

**Key words:** wing, measurement information system, wireless sensors.