**[Day, Date, Session, Time - Filled in by PWST Workshop Chair]**

**"Passive Wireless Sensor Technologies & Needs - a Library of Information"**

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**Abstract:** The motivation and background for the Passive Wireless Sensor Technology Workshops (PWST) will be presented. The intent of these workshops is to provide information that fosters relationships that advance technologies which reduce wires, connectors and penetrations in aerospace vehicles. Both users, stakeholders and developers and capability providers are invited that bring something new to a library of needs and technologies in world of less wires, connectors and penetrations. An overview of what is planned for the two-day workshop at WiSEE 2017 will be covered next, including the method of signing up for and conducting the one-on-one sessions. In addition, a summary of past PWST Workshop presentations will be introduced that enables interested parties to quickly discover which publicly accessible presentations are of interest. The various types of Passive Wireless Sensor Technologies are a part of the tool-box of alternatives to standard wired connections – one of three important legs of the “Fly-by-Wireless” approach George has promoted for over 17 years. The other 2 elements are: the vehicle architectural provisions and management direction, skills and metrics.

**Background:**

Mr. George Studor retired from NASA in October 2013. Since then he has concurrently been a consultant to the NASA Engineering and Safety Center for three Technical Discipline Teams(TDTs): Avionics TDT - Wireless Avionics Connections, Non-Destructive Evaluation TDT – In-Space Inspection, and Robotic Spacecraft TDT – Application of Natural Systems to Systems Engineering process. George organized and chaired 4 previous Passive Wireless Workshops in 2011, 2012, 2013 and 2015 supported by the Avionics TDT, the Industrial Society for Automation and DOE, Oak Ridge National Labs. In addition, he has been consultant to the Image Science and Analysis Group at Johnson Space Center through Jacobs Engineering to develop a detailed study of Soyuz Spacecraft In-Space Inspection. As a senior project engineer for technology applications in the Strategic Opportunities and Partnership Development Office of the Johnson Space Center. In the past 20 years, he has championed numerous successful wireless flight instrumentation projects for dual-purpose technology -operational use demonstrations on Space Shuttle Orbiters and International Space Station. Applying the lessons learned, he has promoted changes to future vehicle architectures to enable reduced wires and connectors through a comprehensive approach called “Fly-by-Wireless”.

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