

New White Paper on Weight Economy and Aircraft Components

Hydra-Electric, a provider of breakthrough sensing technology, announced the publication of its latest white paper discussing weight reduction and the design of aircraft measurement devices. The focus on weight economy has become increasingly important over the past decade, as there have been a growing number of sensing devices incorporated in the various monitoring systems throughout the aircraft. For example, the number of units incorporated for health maintenance as well as control systems has quadrupled over the past 10 years. Consider that many of the monitoring systems are discretely located around the aircraft



into smaller structures. More discretely distributed systems means there are more mountings required for holding the forces induced by vibration, shock or acceleration, even for these small devices.

The consideration of weight is among the key requirements typically defined for aircraft measurement devices such as pressure and temperature sensors. There are always going to be tradeoffs between weight limitation and its impact on performance, which is why it is important to incorporate modeling techniques to highlight these tradeoffs. The white paper also provides examples of how creative approaches to component design can enable weight requirements to be met without sacrificing performance. The white paper was published by Hydra-Electric,

which designs and manufactures aerospace sensors and switches. The company responds to its customers' requests to minimize component weight while meeting tight performance requirements with innovative, patent pending designs.

The whitepaper can be downloaded at the Hydra-Electric Knowledge Center at www.hydraelectric.com/knowledgecenter, along with other white papers targeted at the aerospace engineering community.

