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### **Aurora Awarded Contract for Integrated Energy Scavenging and Storage System**

**Manassas, VA**, April 6, 2010 – Aurora Flight Sciences announced today that it has been selected for an award through the Defense Advanced Research Projects Agency (DARPA) Microsystems Technology Office (MTO) to develop an integrated energy scavenging and storage system for portable electronics, unmanned vehicles, and weapons systems. The majority of wireless devices are powered by batteries, which must be replaced or recharged when depleted; this is a major limitation for remotely located systems. Solar energy scavenging is widely used for recharging, but alternative technologies are required to provide night time scavenging capability to extend system lifetime and utility. Aurora's concept will target infrared (IR), or thermal radiation, as a nocturnal energy source.

Aurora's effort will develop and evaluate an integrated system that includes both solar cells for day time use and infrared photovoltaic cells for night time use, as well as integrating these energy sources with thin-film lithium batteries. "Thin-film micro-batteries have remarkable performance and life compared to everyday batteries," said Dr. Philip Johnson, the program's principal investigator. "When embedded with ambient energy scavenging devices we have the prospect of batteries that will remain perpetually charged." A key attribute will be the development of the energy sources and batteries not just as individual technologies, but integrating them into a reliable night/day power system, including innovative ways to package the system into existing vehicle or weapons systems structures. Aurora believes that this integrated scavenging and storage system technology may provide extended lifetime and utility to other systems, such as unmanned aerial vehicles (UAVs), in the future.

### **About Aurora Flight Sciences**

Aurora Flight Sciences designs and builds robotic aircraft and other advanced aerospace vehicles for scientific and military applications. Aurora is headquartered in Manassas, VA and operates production plants in Bridgeport, WV and Columbus, MS and a Research and Development Center in Cambridge, MA. To view recent press releases and more about Aurora please visit our web site at [www.aurora.aero](http://www.aurora.aero).

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