

# Lockheed Martin To Develop Collaboration And Experimentation Environment To Help Produce Software-Intensive Systems

PRNewswire  
CHERRY HILL, N.J.

The U.S. Air Force Research Laboratory (AFRL) awarded Lockheed Martin \$2.25-million, 36-month contract to build and initially operate a collaboration and experimentation environment to support Phase II of its Software-Intensive Systems Producibility Initiative (SISPI). The project is expected to improve the quality of software created for military applications while significantly reducing development costs.

Called SPRUCE, the collaboration and experimentation environment will formalize the interaction among academic researchers, contractor software developers and systems engineers, Department of Defense (DoD) program and research sponsors, and commercial tool vendors - together referred to as the SISPI community. The current lack of systematic collaboration among members of the community has made it difficult for the DoD to find and/or adopt SISPI technologies, regardless of inherent promise. The result has been repeated issues with software producibility across many programs.

SPRUCE will for the first time allow the community to use a uniform, collaborative process to identify, develop, experiment and transition technologies in software producibility. Efficiencies in time and cost as well as increased utility and integration of new SISPI technology will be dramatic.

"We expect to revolutionize the way software producibility technologies are identified, discovered, developed, evaluated and transitioned," said Rick Buskens, manager of Advanced Software Technology Research at Lockheed Martin's Advanced Technology Laboratories (ATL). "SPRUCE will eliminate artificial barriers to collaboration, while enabling realistic, full-scale experimentation to rigorously evaluate technologies."

SPRUCE will be a virtual, distributed, open, web-accessible, collaboration, and experimentation environment. It will use commercial hardware, customized collaboration software, and commercial and customized experiment infrastructure. Operational use cases will guide participants through collaborative activities. Activities will include identification and specification of challenge problems, candidate technologies to solve proposed challenge problems, and experiments that will evaluate how well technologies solve challenge problems. SPRUCE's ability to encourage community collaboration will be an important part of the program.

The ATL team will also leverage Lockheed Martin's Software Technology Initiative, a \$6-million, multi-year program, which is solving issues associated with building and integrating software-intensive systems, to initially populate SPRUCE with candidate solution technologies.

ATL leads a team of Booz Allen Hamilton, Drexel University, and Vanderbilt University.

Headquartered in Bethesda, Md., Lockheed Martin employs about 140,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation reported 2007 sales of \$41.9 billion.

For additional information on Lockheed Martin Corporation, visit our website:

[www.lockheedmartin.com](http://www.lockheedmartin.com)

First Call Analyst:  
FCMN Contact:

SOURCE: Lockheed Martin

Web site: <http://www.lockheedmartin.com/>

Company News On-Call: <http://www.prnewswire.com/comp/534163.html>

---

<https://news.lockheedmartin.com/2008-04-30-Lockheed-Martin-To-Develop-Collaboration-and-Experimentation-Environment-To-Help-Produce-Software-Intensive-Systems>