ASTM International Benefit-Cost Analysis of Committee F37 on Light Sport Aircraft to the Light Sport Aircraft Community and the FAA

This cost benefit analysis was prepared for the Federal Aviation Administration (FAA) to identify the financial benefit to the Light Sport Aircraft (LSA) community resulting from standardization through ASTM International. The analysis includes: A background on standardization, ASTM International, and Committee F37; A summary of industry man-hours and direct expenses contributed; and present and future contributions from ASTM International for standards development and maintenance.

Public Law 104-113, or the National Technology Transfer and Advancement Act (NTTAA), requires government agencies to use consensus standards when practicable. Standards developed are then used by agencies and industry for various purposes including procurement, manufacturing, safety, commerce, and conformity assessment. For LSA standards for materials, certification, design and airworthiness, etc., the FAA and other LSA stakeholders have utilized ASTM International. Execution of the NTTAA through ASTM enables regulators to work directly with the industry and leverage private sector expertise to produce standards of the highest technical integrity while avoiding standards development costs. As a result, ASTM will enable the timely release of these standards and free the FAA of resources necessary to administer a standards program. Use of another standard development medium may have increased the cost to industry and FAA, and may have failed to produce the deliverables in the time frame demanded.

Use of ASTM International is purely a benefit to FAA and industry. First, members are not reimbursed for their expertise, time or travel - it is a contribution. Their benefit, which may vary among members, would include the ability to shape standards in a fashion that benefits the LSA community and increasing the safety of the sport, etc. Second, ASTM provides specialized resources and competence for standards development that agencies do not usually maintain and are not necessarily equipped to employ, including: an administrative support system for development and continued maintenance of standards, a global distribution network, staff oversight for regulated consensus, tools to accelerate standards development and enhance collaboration, and market research and stakeholder gathering.

There are many other benefits, not driven by a financial model, that result from standardization. In the case of LSA, a few of these benefits include: the high quality of the technical material, increased safety of products, reduced liability to manufacturers, access to capital funding, consumer confidence in the products and the sport, and industry support ("buy-in") as a result of member ability to contribute to the standards that will compliment the regulation. Combined, these elements will provide for the growth of the LSA industry. The discussion in Section IV of this report speculates a \$120 million benefit to the LSA industry over then next 18 - 24 months as a result of industry expansion and increased product demand prompted by standardization and the release of the Rule.

The ASTM value of services provided to the industry and the FAA is the contribution of the +/- 100 participating members in time and travel in conjunction with the administrative support from ASTM. This value is a direct savings to the taxpayer.

For 12 months ending May 2003:

Contribution in Direct Costs from Participating Members:	\$ 194,098
(direct cost of participant travel)	
Industry Time Contribution by Members:	\$ 834,880
(man-hours spent on standards activities of LSA industry members)	
Administrative Contribution in Support of Standards Program:	\$ 124,744
(ASTM International direct expense and overhead)	

Total benefit to the FAA, industry, and US taxpayer:

\$ 1,153,722

As workflow is moderated, meeting attendance plateaus, members become savvier in the system, and documents move into a maintenance mode, the costs associated with standardization to the industry will decline. However, the benefit, especially those associated with continued program maintenance by ASTM International, will remain consistent. From years 2 - 5, an additional \$ 2,425,433 in benefit from continued standards development and program maintenance can be projected.

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