

## **SOLUS Drag Audit and Drag Clean-Up**

SOLUS is committed to help the freight industry drive down aerodynamic drag related costs in order to increase our Nations energy, economic, and environmental security.

The yearly cost to overcome aerodynamic drag exceeds \$50,000.00/truck. On a national scale these costs exceed \$125Billion each year. The SOLUS near-term goal is to reduce transportation system drag by 20% resulting in annual savings of \$25 Billion, emission reduction of 40 Million tons, and a reduction in our trade deficit of \$10 Billion.

A Drag Audit is the critical first step to a successful Drag Clean-up activity and the development of Aerodynamic Technology guidelines for your operations. To achieve success SOLUS uses a knowledge-based process built on 30 years of aerodynamic experience and a proprietary data-base. The Drag Audit and subsequent Drag Clean-up and Aerodynamic Technology guidelines provided by SOLUS will ensure you maximize your fuel savings.

A thorough review of existing data indicates that the aerodynamic drag on a tractor-trailer vehicle is dominated by trailer drag. These overarching findings indicate a 40% drag reduction potential for heavy trucks, providing a maximum fuel savings of 20%.

The SOLUS Drag Audit process systematically reviews the geometric features of a ground vehicle to generate aerodynamic drag estimates based upon; 1) industry accepted data for known simple shapes and 2) data contained in the SOLUS proprietary database. Included in the Drag Audit is a review of your operational and maintenance procedures and a review of your in-operation environment. These additional real-world factors are used to modify the aerodynamic drag estimates to ensure relevance to your specific fleet.

A Drag Clean-up effort is based upon the Drag Audit results and consists of recommendations that outline minor geometric and use modifications to the basic vehicle or to individual components or structures on the vehicle. A typical Drag Clean-Up activity will

generate between 2 and 4% fuel savings with a ROI of less than 12 months.

The final step in the process is the development of Aerodynamic Technology guidelines for your equipment. Aerodynamic Technology guidelines are tailored to meet the specific interests of the customer and as such may focus on a specific vendor or product.

SOLUS will structure the Drag Audit, Drag Clean-Up and Aerodynamic Technology process to meet the specific needs of each customer. Contact SOLUS to discuss options for your operation.