

Motor Vehicle Fire Research Institute Awarded Contracts

Title: Establishment of an Automotive Fire Safety Library

Contractor: The George Washington University

Duration: May 15, 2002 – November 15, 2003

Purpose:

The FHWA/NHTSA National Crash Analysis Center (NCAC) is located at the George Washington University's Virginia Campus. Currently, the NCAC Film Library houses the entire collection of FHWA and NHTSA crash tests films and reports. Additionally, the library is a repository for numerous technical reports in the fields of structural crashworthiness, computer modeling and simulation, biomechanics, roadside hardware, etc. This library is a valuable resource for researchers in academia, government, industry, and legal professions and serves as a single location for obtaining this type of data and technical information.

By the nature of most any propulsion system, flammability and combustion are critical issues that must be safely contained. Fire safety has progressed along side the automobile since its inception. Beyond the internal combustion engine, fire safety also has relevancy when looking at fuel storage, fuel delivery, electrical systems, and airbags. Furthermore, current and future automobiles face new challenges such as hydrogen and natural gas storage, fuel cells, high voltage electrical systems (42 volt), and multi-source propulsion systems (Hybrids). As fire safety issues expand and enter into more difficult and unfamiliar areas, it is increasingly important to consolidate specific resources so that this development can proceed accordingly.

The work proposed herein will assemble published reports, test reports and data, test videos, and other relevant documents that deal with motor vehicle fire safety. Sources of data will include the NHTSA dockets and the NHTSA technical library, the DoT/GM Settlement research, the Center for Auto Safety files and materials produced in court cases. All publicly available resources will be included and, where possible, international sources of data will also be utilized and stored, which will include the European Union, Canada, Australia, Japan, and the ROW. Furthermore, efforts will be made to include private data collections such as Insurance Data Records, Non-proprietary Industry Records, etc.

The work will also build on the capabilities of the current NCAC Library, by providing searchable web-based databases. Wherever possible, resources and references will be maintained in digital/electronic form, making them easily accessible and down-loadable to the general public. Additionally, certified/official hardcopies of all documents will also be made available for public acquisition.

In addition to establishing an automotive fire safety collection, this project will also provide hosting for the MVFRI web-site. A dedicated server will be provided to handle electronic data from the fire safety collection, web-site hosting, and all NASS data and NASS data search tools as described in the parallel contract "Accident Data Analysis and Investigation Tools."