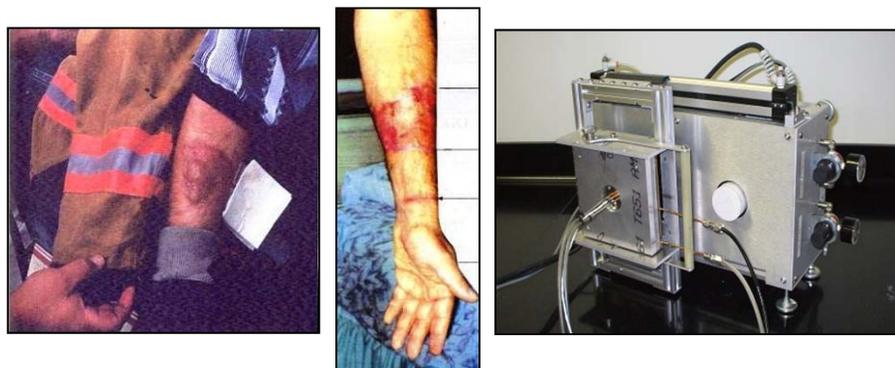


# Stored Thermal Energy Test Method for Evaluation of Fire Fighter PPE – FY12 (939ZUNN)

## Objective

To develop and validate a stored thermal energy test method to simulate low intensity exposures for evaluating ensemble propensity to prevent stored thermal energy burns



## Applicable Standards

- ASTM F23 ASTM Standard: F2731-2010, *Test Method For Measuring the Transmitted and Stored Energy of Firefighter Protective Clothing Systems*
- NFPA 1971, *Standard on Protective Ensemble for Structural and Proximity Fire Fighting, 2012 Proposed Edition*

## Key Partners

- N.C. State University
- NIST
- NFPA Research Foundation

## Stakeholders

- Fire Fighters
- Manufacturers
- Test Labs



## Project Scope

- Develop stored thermal energy test method and apparatus
- Assist in the completion of the ASTM standard within the F23 Committee on Protective Clothing and Equipment
- Provide recommended application and criteria to NFPA 1971 TC

## Milestones FY 12

- Q1 Complete interlaboratory study and final report from NCSU
- Q3 Obtain STE apparatus from NCSU for installation in Morgantown
- Q4 Project is complete

## Expected/Completed Outputs

- Presentations at standards meetings (12) and conferences (5) – Completed
- NFPA Public Proposals and Comments, with recommended test methods and criteria for the NFPA 1971 Standard - Completed
- Journal articles in Fire Technology, Fire Engineering, Textile World and the ASTM Protective Clothing and Equipment STP - Completed
- Final Report NFPA Foundation and NCSU - Completed

## Completed Outcomes

- New ASTM Standard: F2731-2010, *Test Method For Measuring the Transmitted and Stored Energy of Firefighter Protective Clothing Systems* - Completed 02/2010
- Incorporated into 2012 Draft of NFPA 1971 – Completed 04/2011

Updated: 28 March 12