

05
 [Handwritten initials/signature]

1 INTERAGENCY AGREEMENT NO EME-1999-IA-0302	2 MODIFICATION NO M002	3 EFFECTIVE DATE	4 PROJECT/REQUISITION NO E386875Y
5 ISSUED BY National Emergency Training Center Satellite Procurement Office S Jane Huwig-Leister 16825 South Seton Avenue Emmitsburg MD 21727		6 AGENCY PERFORMING SERVICE U S CONSUMER PRODUCT SAFETY COMMISSION ATTN BILL KING EAST WEST TOWERS 4330 E W HIGHWAY BETHESDA MD 20814	
7 PROJECT TITLE See Block #9 Below			
8 ACCOUNTING AND APPROPRIATION DATA (if required) See Continuation Page			

9 DESCRIPTION OF MODIFICATION

The purpose of this modification is to include the attached Statement of Work as part of the Agreement

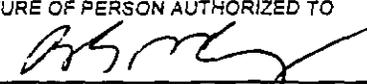
This IA includes the following projects Range Fire Project Residential Electrical Wiring, Smoke Detector Research and Sprinkler Head Technology

Period of Performance for this IA expires June 30, 2001

Previous Total \$125,000 00 Increase By \$250,000 00 New Total \$375,000 00

Consumer Product Safety Commission will charge actual costs incurred

Except as provided herein, all other terms and conditions of the agreement remain in full force and effect.

10 SIGNATURE OF PERSON AUTHORIZED TO SIGN 	DATE 6/1/00	12 SIGNATURE OF PERSON AUTHORIZED TO SIGN 	DATE 6/1/00
11 TYPE NAME & TITLE OF PERSON AUTHORIZED TO SIGN Robert J. Frost, Contracting Officer US CONSUMER PRODUCT SAFETY COMMISSION		13 TYPE NAME & TITLE OF PERSON AUTHORIZED TO SIGN Bryan McCreary Contracting Officer FEDERAL EMERGENCY MANAGEMENT AGENCY	

A.1 PRICE/COST SCHEDULE

TEM O.	DESCRIPTION OF SUPPLIES/SERVICES	QTY	UNIT	UNIT PRICE	AMOUNT
1001	RANGE FIRE SAFETY	1	job	\$250,000.00	\$250,000.00
	SMOKE DETECTOR RESEARCH			\$50,000.00	
	SPRINKLER HEAD TECHNOLOGY			\$100,000 00	
	FUNDING/REQ NO: 01:			\$250,000.00	E366875Y
				PAGE SUBTOTAL -	<u>\$250,000.00</u>
				GRAND TOTAL ---	<u><u>\$250,000.00</u></u>

ACCOUNTING AND APPROPRIATION DATA.

ACRN APPROPRIATION	REQUISITION NUMBER	AMOUNT
01 2000-03A-6200 -6400 -E64014-2589-D	E366875Y F	\$250,000.00

CPSC Appropriation Data:

00 EXOB-PS 4400.00	0021725 25.3101	\$ 50,000.00
00 EXOB-PS 4400.00	0021725 25.3101	\$100,000.00
00 EXOB-PS 4400.00	0021725 25.3101	\$100,000.00
	TOTAL	\$250,000.00
	PREVIOUS TOTAL	\$125,000.00
	INCREASE BY	<u>250,000.00</u>
	TOTAL	\$375,000.00

TABLE OF CONTENTS

CPSC-IAG-99-1172; MOD #2

PAGE

A.1	PRICE/COST SCHEDULE	2
-----	-------------------------------	---

Scope of Work Smoke Alarm Research Project

CPSC, in co-operation with other government agencies and non-governmental organizations, will conduct research toward the following objectives:

1. To develop a method to evaluate detector and alarm performance in real fires.
2. To demonstrate the capabilities of present and emerging technology of residential fire detection and alarm devices.
3. To identify potential improvements in residential fire detection and alarm devices.
4. To develop information to be used in codes and standards relating to fire detection and alarm devices, their installation, testing, and maintenance.
5. To develop consumer information on selection, installation, and performance of fire detection and alarm equipment.

CPSC will coordinate and document research efforts with interested organizations such as the National Institute for Standards and Technology (NIST); the Center for Disease Control (CDC), U.S. Public Health Service; U.S. Department of Housing and Urban Development (HUD); National Fire Protection Association (NFPA); Underwriters' Laboratories (UL); fire detection and alarm manufacturers, and other interested parties.

CPSC will make quarterly reports to USFA, briefly summarizing activities during the reporting period, accomplishments, funds expended, problems encountered or anticipated, and plans for the succeeding quarter. A complete technical report will be made on conclusion of the project. Special reports on specific technical topics may also be required.

It is expected this Project will require two years from effective date.

SMOKE ALARM RESEARCH PROJECT

OVERVIEW

In co-operation with several other government agencies and, possibly, private organizations, the U.S. Consumer Product Safety Commission (CPSC) will coordinate the evaluation of current and emerging smoke alarm technology responses to common residential fire scenarios and nuisance alarm sources. The research will be done at the National Institute of Standards and Technology (NIST) under the direction of a steering committee of the sponsoring organizations. As noted in the attached statement of work, this research will provide the basis for reaching a number of objectives.

FUNDING

The total budget for this two-year project is \$1 million. The U.S. Fire Administration will contribute \$100,000 to this effort in FY 2000 through this interagency agreement with the CPSC. CPSC will subcontract the USFA's portion of the research work to NIST. A comparable contribution is expected in FY2001 to complete the project.

**ESTIMATED BREAKDOWN OF MAJOR COSTS FOR FY2000
UNITED STATES FIRE ADMINISTRATION FUNDS FOR THE U.S.
CONSUMER PRODUCT SAFETY COMMISSION
FIRE SPRINKLER PROJECT
SPRINKLER RESEARCH – \$100k**

The presence of fire sprinklers is growing as more local governments are adopting legislation requiring their installation in residential markets. The October 1998 CPSC recall of the Omega brand fire sprinkler and other subsequent recalls and events have raised the agency's concern about performance of fire sprinklers. The CPSC staff has learned that over time, the applications and technologies of fire sprinklers have changed, but the safety standards and codes have not been updated to ensure long-term reliable performance.

In FY 1999, the CPSC began the Fire Sprinkler Project to collect data on residential fires involving fire sprinklers, identify scope and causes of failures through test and evaluation of new and field sprinklers, and develop recommendations to reduce likelihood of failures. In November 1999, the CPSC held a meeting with fire sprinklers manufacturers to present findings of potential failure modes of fire sprinklers. At the request of the CPSC staff, the sprinkler manufacturers agreed to form a consortium to conduct research aimed at identifying specific problems with sprinkler performance and to use the information gained to recommend improvements in the codes and standards for fire sprinklers that will improve their reliability. In addition to this work by the sprinkler industry, the CPSC staff will use the funds from this IAG to.

1. Investigate fires where sprinklers are present
2. Obtain sprinklers from those fires
3. Conduct laboratory testing and evaluation on the sprinklers collected
4. Prepare a report on the findings from the study conducted by the CPSC staff. This will include both a summary of the fire incident data and the laboratory test results.

Deliverables to USFA.

1. The CPSC staff will prepare a report summarizing the results of this project for use by organizations who develop codes and standards for testing, listing, installing, and maintaining fire sprinklers

Total Estimated Cost (professional, travel, test equipment, other expenses) _____ \$80 K

2. The CPSC staff will provide quarterly reports to USFA, briefly summarizing activities, accomplishments, and expenditures during the period, problems encountered and anticipated.

Total Estimated Cost (professional, travel, other expenses) _____ \$20 K

TOTAL COST FOR ITEMS 1 & 2 _____ \$100 K

**Estimated Breakdown of Major Costs for FY00 United States Fire Administration
Funds for the U.S. Consumer Product Safety Commission Range Fires Project**

Range Control Manufacturability Study - \$50k

Range fires have been the leading cause of residential fires and fire injuries from products under CPSC's jurisdiction for many years. Most range fires involve the ignition of cooking materials. Since 1995, CPSC and the USFA have partnered in studying ways to reduce the number of cooking-related fires. Under the CPSC Range Fires Project, the National Institute of Standards and Technology (NIST) conducted tests to help define the conditions preceding cooking fires. CPSC staff used this work as a foundation to conduct additional tests that led to the development of an experimental control system for an electric range. With FY99 funds from USFA, CPSC contracted Energy International to design a similar system for a gas range. Tests on these experimental control systems for gas and electric burners demonstrated that there are methods to prevent ignition of cooking materials on rangetops by reducing burner heat output while minimally affecting normal cooking.

These experimental systems were intended to be a starting point, leaving key issues such as reliability and durability as details of implementation for manufacturers to address. However, the range industry was reluctant to consider redesigning ranges to address this risk. As a result, CPSC staff has requested standards developers for gas and electric ranges to develop requirements to lessen the risk of cooking fires. To support efforts to revise safety standards to address cooking fires, CPSC will issue a contract to review the project to date and evaluate the impact of implementing changes. The task, which will cost approximately \$50000, is broken down as follows:

- A) Review of NIST, CPSC and EI reports
- B) Meet with CPSC staff to discuss reports
- C) Perform design/cost study
- D) Evaluate key performance issues:
 - Reliability
 - Durability
 - Operation Issues
 - Safety
 - Cooking Performance
- E) Report on Results

JUN 01 2000

May 2000