OSAC RESEARCH NEEDS ASSESSMENT FORM

Title of research need: Extracting event-relevant data from electronic sources

Keyword(s):   collection of data, fire origin determination, electronic surveillance, internet of things

Submitting subcommittee(s):   Fire and Explosion   **Date Approved:**

(If SAC review identifies additional subcommittees, add them to the box above.)

Background Information:

1. Description of research need:

Fire investigators need to understand the type of information that might be available and how to access that information. Likely being evidence, investigators need to understand the issue of protection and preservation of this information. Aside from a brief mention, there is no information on this topic currently in NFPA 921. Research is needed to develop awareness of methods for collecting, extracting, and analyzing data from the variety of electronic sources now finding their way into residential and commercial buildings. Most also recognize the importance of information from security cameras and alarm systems. Data from "internet-of-things" devices that might be stored within the device, at some remote storage location, or in the cloud can provide significant insight into fire origin.

2. Key bibliographic references relating to this research need:

3a. In what ways would the research results improve current laboratory capabilities?

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

3c. In what ways would the research results improve services to the criminal justice system?

This research will help the fire investigation community to make use of data that is increasingly more available and can assist with their origin determination.

4. Status assessment (I, II, III, or IV): [I]

	Major gap in current knowledge	Minor gap in current knowledge
No or limited current research is being conducted	I	III
Existing current research is being conducted	II	IV

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.

Approvals:

Subcommittee | Approval date: [   ]

(Approval is by majority vote of subcommittee. Once approved, forward to SAC.)

SAC

1. Does the SAC agree with the research need?   Yes [ ]   No [ ]

2. Does the SAC agree with the status assessment?   Yes [ ]   No [ ]

   If no, what is the status assessment of the SAC: [   ]

Approval date: [   ]

(Approval is by majority vote of SAC. Once approved, forward to NIST for posting.)