



Priority Action Report

Fire and Explosion Investigation

Crime Scene/Death Investigation

Craig Beyler, Chair

30 January 2016





Subcommittee Leadership

Position	Name	Organization	Term	Email
Chair	Craig Beyler	Jensen Hughes		cbeyler@jensenhughes.com
Vice Chair	Philip Crombie, Jr.	Travelers	3	pcrombie@travelers.com
Executive Secretary	Gregory Gorbett	University of Eastern Kentucky	3	greg.gorbett@eku.edu



Subcommittee Members



#	Name	Organization	Term	Email
1	Charles "Randy" Watson	SEA, Ltd.	2 Years	cwatson@sealimited.com
2	John Lentini	Scientific Fire Analysis, LLC	2 Years	johnlentini@yahoo.com
3	Mark Goodson	Goodson Engineering	3 Years	mark@goodsonengineering.com
4	Elayne Pope	Office of the Chief Medical Examiner in Norfolk, VA	2 Years	ebone50@hotmail.com
5	Chad Wissinger	Ohio Division of State Fire Marshal Forensic Lab	3 Years	cwissinger@com.state.oh.us
6	David McCollam	Federal Bureau of Investigation	2 Years	david.mccollam@ic.fbi.gov
7	Melvin Robin	Bureau of Alcohol, Tobacco, Firearms & Explosives	3 Years	MELVIN.ROBIN@ATF.GOV
8	John Golder	Bureau of Alcohol, Tobacco, Firearms & Explosives	3 Years	john.golder@atf.gov
9	Steven Carman	Carman & Associates Fire Investigation, Inc.	2 Years	steve@carmanfire.com
10	Mark Johnson	University of Central Florida, Dept of Statistics	2 Years	Mark.Johnson@ucf.edu
11	Chris Connealy	Texas State Fire Marshall	3 Years (new)	chris.connealy@tdi.texas.gov
12	David Sheppard	ATF Fire Lab	3 Years (new)	david.sheppard@atf.gov
13	Steve Campolo	Leviton	3 Years (new)	scampolo@Leviton.com
14	Scott Davis	Gexcon	3 Years (new)	sgdavis@gexcon.com
15	Michael Truebenbach	Federal Bureau of Investigation	3 Years (new)	mike.truebenbach@ic.fbi.gov

Discipline Description



The OSAC Subcommittee on **Fire and Explosion Investigation** focuses on standards and guidelines related to the investigation, analyses and interpretation of fire and explosion incidents. The subcommittee will work closely with OSAC Subcommittee on Fire Debris and Explosives (Chemistry/Instrumental Analysis SAC).

Summary of Priority Actions

Priority	Priority Action
High	Candidate Registry Documents: NFPA 921, 1033 ASTM E860, E678, E620, E1459, E1188, E1020
High	Competencies
High	Documentation, report writing
High	Comparative analysis of relevant standards
High	Research agenda





Standards/Guidelines Development Priority 1 Registry Candidates

Document Titles: NFPA 921, 1033
ASTM E860, E678, E620, E1459, E1188, E1020

Scope: Fire and Explosion Investigation, Professional
Qualifications

Objective/rationale: Define a scientifically based investigation
methodology for fire and explosions, establish qualifications
required by investigators

Issues/Concerns: RA-100 status



Standards/Guidelines Development Priority 1 Document



Title	Organization	OSAC Process
Guide for Fire and Explosion Investigations, 921, 2014	NFPA	Guide RA-100
Standard for Professional Qualifications for Fire Investigator, 1033, 2014	NFPA	Standard RA-100
Standard Practice for Examining and Preparing Items that Are or May Become Involved in Criminal or Civil Litigation, E 860, 2007 (2013)	ASTM	Standard RA-100
Standard Practice for Evaluation of Scientific or Technical Data, E 678, 2007	ASTM	Standard RA-100
Standard Practice for Reporting Opinions of Scientific or Technical experts, E620, 2011	ASTM	Standard RA-100
Standard Guide for Physical Evidence Labeling and Related Documentation, E1459, 2013	ASTM	Standard RA-100
Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator, E1188, 2011	ASTM	Standard RA-100
Standard Practice for Reporting Opinions of Technical Experts, E1020, 2013	ASTM	Standard RA-100





Priority 1: Registry Candidates Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
SAC Approval	RA 400	Crime Scene SAC	1 April 2016
Subcommittee Adjudication	RA 700	F&E Subcomm.	1 July 2016
SAC Approval For Registry	RA 1100	Crime Scene SAC	1 September 2016
Guidelines Registry Posting	RA 1500	QIC	1 October 2016
Standards Registry Posting	RA-2100	FSSB/QIC	1 December 2016





Standards/Guidelines Development Priority 2 Action: Competencies

Task Group Title: Competencies

Scope: Evaluation of investigator competencies required

Objective/rationale: Enhance investigator competency

Issues/Concerns:

- Evaluate existing training/competency requirements
- Develop proposals for training and competencies
- Proposals are expected to be to NFPA 1033, Standard for Professional Qualifications for Fire Investigator, whose 2020 edition revision cycle begins in 2017.

Task Group Name: Competencies

Task Group Chair Name: John Lentini

Task Group Chair Contact Information: johnlentini@yahoo.com





Standards/Guidelines Development Priority 3 Action: Documentation

Task Group Title: Documentation

Scope: Documentation of the investigation, report preparation

Objective/rationale: Enhance quality of investigation reports

Issues/Concerns:

- Review current guidelines on documentation and content
- Develop documentation, report preparation requirements
- Develop model investigation reports
- Develop proposals as needed for NFPA 921 and 1033 for 2020 edition.

Task Group Name: Report Writing

Task Group Chair Name: Dixon Robin

Task Group Chair Contact Information: MELVIN.ROBIN@ATF.GOV



Standards/Guidelines Development

Priority 4 Action: Comparative analysis of relevant standards

Document Title: Comparative Analysis

Scope: NFPA 921, 1033, 1730, 1037

Objective/rationale: Gap analysis, areas for enhancement

Issues/Concerns:

- Identifying gaps that may exist in current processes, methodology, competencies required, and research in NFPA 921, NFPA 1033, NFPA 1730, NFPA 1037.
- Develop proposals to relevant document where basis exists
- Provide input to research agenda where gaps cannot be filled with existing science

Task Group Name: Comparative analysis

Task Group Chair Name: Greg Gorbett

Task Group Chair Contact Information: greg.gorbett@eku.edu



Standards/Guidelines Development Priority 5 Action: Research Agenda

Task Group Title: Research Agenda

Scope: Review scientific research, guide future research

Objective/rationale: Develop a F&E Research Agenda

Issues/Concerns:

- Review state-of-the-art of fire and explosion investigation science and review related fire and explosion scientific literature
- Develop a research agenda addressing needs in methodologies and processes for fire and explosion investigations.

Task Group Name: Research Agenda

Task Group Chair Name: Phil Crombie

Task Group Chair Contact Information: pcrombie@travelers.com



Standards/Guidelines Development Registry Process Status



Title	Organization	OSAC Process
Guide for Fire and Explosion Investigations, 921, 2014	NFPA	Guide RA-100
Standard for Professional Qualifications for Fire Investigator, 1033, 2014	NFPA	Standard RA-100
Standard Practice for Examining and Preparing Items that Are or May Become Involved in Criminal or Civil Litigation, E 860, 2007 (2013)	ASTM	Standard RA-100
Standard Practice for Evaluation of Scientific or Technical Data, E 678, 2007	ASTM	Standard RA-100
Standard Practice for Reporting Opinions of Scientific or Technical experts, E620, 2011	ASTM	Standard RA-100
Standard Guide for Physical Evidence Labeling and Related Documentation, E1459, 2013	ASTM	Standard RA-100
Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator, E1188, 2011	ASTM	Standard RA-100
Standard Practice for Reporting Opinions of Technical Experts, E1020, 2013	ASTM	Standard RA-100





Standards/Guidelines Reviewed For Technical Merit

Title	Developing Organization	Status*	OSAC Process Stage (e.g., RA 100)
NFPA 1037 Professional Qualifications for Fire Marshal, 2012 edition	NFPA	Evaluating	R-000
NFPA 1730 Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations, 2016 edition	NFPA	Evaluating	R-000



Research Gaps Identified

- Potential for reducing bias in fire and explosion investigations
- Validation of origin and cause determination protocols

Research Needs Assessment forms completed for the above.
A more comprehensive Research Agenda is under development



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