

## CFBT Blog Post Index

Date	Title/Link	Narrative
080830	An Ongoing Conversation	Opening post for the CFBT Blog
080831	Online Ventilation and Fire Behavior Course <a href="http://cfbt-us.com/wordpress/?p=4">http://cfbt-us.com/wordpress/?p=4</a>	Review of an online course by CFITrainer.net. This course examines the relationship between ventilation and fire behavior. While designed and developed for fire investigators, the course provides excellent information for firefighters, fire officers, and fire behavior instructors.
080922	Loudoun County VA Flashover <a href="http://cfbt-us.com/wordpress/?p=5">http://cfbt-us.com/wordpress/?p=5</a>	First in a series of posts examining a serious injury incident involving flashover during an residential fire in Loudoun County VA. This post examines initial information about the incident and sets the stage for examination of fire behavior and tactical operations.
080925	Loudoun County VA Flashover: What Happened <a href="http://cfbt-us.com/wordpress/?p=6">http://cfbt-us.com/wordpress/?p=6</a>	Second post examining a serious injury incident involving flashover during an residential fire in Loudoun County VA. This post examines initial incident operations and fire behavior up until the time at which flashover occurred.
080928	Loudoun County VA Flashover: Escape From Floor 2 <a href="http://cfbt-us.com/wordpress/?p=9">http://cfbt-us.com/wordpress/?p=9</a>	Third post examining a a serious injury incident involving flashover during an residential fire in Loudoun County VA. This post details actions taken by the crews of the first arriving companies immediately after the flashover that trapped them on the second floor.
081002	Flashover and Firefighter Survival Skills <a href="http://cfbt-us.com/wordpress/?p=13">http://cfbt-us.com/wordpress/?p=13</a>	Fourth post examining a a serious injury incident involving flashover during an residential fire in Loudoun County VA. This post provides a critique of recommendations related to flashover and survival skills training following this incident.
081005	Positive Pressure Ventilation: Theory and Practice <a href="http://cfbt-us.com/wordpress/?p=14">http://cfbt-us.com/wordpress/?p=14</a>	Review of <a href="#">NIST Goes Back to School</a> by Steve Kerber published in the September/October 2008 issue of <i>NFPA Journal</i> .
081009	Hazard of Ventilation Controlled Fires <a href="http://cfbt-us.com/wordpress/?p=16">http://cfbt-us.com/wordpress/?p=16</a>	Review of <a href="#">Grading the Fireground on a Curve</a> , by Mark Emery published in the September 2008 issue of <i>Firehouse</i> magazine.
081013	Near Misses, Injuries, and Fatalities, Just Part of the Job? <a href="http://cfbt-us.com/wordpress/?p=17">http://cfbt-us.com/wordpress/?p=17</a>	This post examines the trend in near misses, injuries, and fatalities due to traumatic cause while operating at structure fires.
081016	That was close! <a href="http://cfbt-us.com/wordpress/?p=19">http://cfbt-us.com/wordpress/?p=19</a>	This post examines a backdraft resulting in minor injuries during live fire training, the importance of near-miss reporting, and the National Near Miss Reporting System.
081020	Entrapment Investigation & Lessons Learned <a href="http://cfbt-us.com/wordpress/?p=20">http://cfbt-us.com/wordpress/?p=20</a>	Examination of the US Forest Service process for investigating wildland fire entrapment incidents and potential benefits to of a similar process for extreme fire behavior events in structure fires.

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081023	Peer Review and Lessons Learned <a href="http://cfbt-us.com/wordpress/?p=21">http://cfbt-us.com/wordpress/?p=21</a>	This post discusses the US Forest Service peer review process and development of lessons learned from accidents and near miss incidents.
081027	Lessons Learned: The Way Forward <a href="http://cfbt-us.com/wordpress/?p=22">http://cfbt-us.com/wordpress/?p=22</a>	This post emphasizes the importance of quantitative and qualitative analysis of near miss, injury, and fatality incidents and proposes a comprehensive approach to investigation and analysis.
081030	Ventilation Tactics: Understanding and Application <a href="http://cfbt-us.com/wordpress/?p=23">http://cfbt-us.com/wordpress/?p=23</a>	This post reviews and critiques Kriss Garcia's article Education vs. Training in Fire Space Control ( <a href="#">Fire Engineering</a> , September 2008).
081103	Smoke Explosion or Backdraft? <a href="http://cfbt-us.com/wordpress/?p=24">http://cfbt-us.com/wordpress/?p=24</a>	Brief discussion of smoke explosion and backdraft as extreme fire behavior phenomena and a video clip of a transient extreme fire behavior event.
081106	It's the GPM <a href="http://cfbt-us.com/wordpress/?p=26">http://cfbt-us.com/wordpress/?p=26</a>	Review and critique of Bob Shovald's article Improving Preconnect Function and Operation published in the October 2009 issue of <a href="#">Fire Engineering</a> magazine. This post also introduces the concept of tactical flow rate and factors influencing effectiveness of fire streams.
081110	Fire Ventilation <a href="http://cfbt-us.com/wordpress/?p=30">http://cfbt-us.com/wordpress/?p=30</a>	This post reviews the text <i>Fire Ventilation</i> by Fire Protection Engineer Dr. Stefan Svenson of the Swedish Civil Contingencies Agency (formerly Räddnings Verket).
081113	NIOSH Firefighter Fatality Investigation and Prevention Program <a href="http://cfbt-us.com/wordpress/?p=31">http://cfbt-us.com/wordpress/?p=31</a>	This post is the first of a series critiquing the <a href="#">NIOSH Firefighter Fatality Investigation and Prevention Program</a> . Commentary is framed in the context of a review of NIOSH <a href="#">Death in the Line of Duty Report F2007-29</a> .
081117	NIOSH Firefighter Fatality Investigation and Prevention Program: Part 2 <a href="http://cfbt-us.com/wordpress/?p=35">http://cfbt-us.com/wordpress/?p=35</a>	This post continues examination of NIOSH <a href="#">Death in the Line of Duty Report F2007-29</a> and makes specific recommendation for improvement of the <a href="#">NIOSH Firefighter Fatality Investigation and Prevention Program</a> .
081120	NIOSH Public Stakeholders Meeting: 19 November 2008, Chicago, IL <a href="http://cfbt-us.com/wordpress/?p=37">http://cfbt-us.com/wordpress/?p=37</a>	Review of the public stakeholder meeting and progress made on improvements to the the <a href="#">NIOSH Firefighter Fatality Investigation and Prevention Program</a> .
081124	Reading the Fire: B-SAHF <a href="http://cfbt-us.com/wordpress/?p=38">http://cfbt-us.com/wordpress/?p=38</a>	This post introduces the B-SAHF organizing scheme for fire behavior indicators (FBI). In addition, it provides the first in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. The video is of an A-Fire in New York City.

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081127	Choose Your Weapon: Part 1 Fire Stream Effectiveness & Efficiency <a href="http://cfbt-us.com/wordpress/?p=40">http://cfbt-us.com/wordpress/?p=40</a>	Review and critique of FF Armand Guzzi's article titled <i>Analysis of Effective Fire Streams-Part I</i> published on <a href="http://firehouse.com">Firehouse.com</a> . The post examines the influence of nozzle pressure on stream quality (droplet size in particular) and how the concepts of effectiveness and efficiency apply to water application for firefighting.
081201	Choose Your Weapon: Part 2 Fire Stream Effectiveness & Efficiency <a href="http://cfbt-us.com/wordpress/?p=45">http://cfbt-us.com/wordpress/?p=45</a>	This post continues the discussion of fire stream effectiveness and efficiency with a discussion of the characteristics of different types of combination nozzles.
081204	Criticism Versus Critical Thinking <a href="http://cfbt-us.com/wordpress/?p=55">http://cfbt-us.com/wordpress/?p=55</a>	Discussion of the difference between being critical of what we see in a video clip or photo of fireground operations and thinking (and discussing) these events from a critical perspective. This post also examines Vent, Enter, & Search (VES) from the perspective of dynamic risk assessment.
081208	Situational Awareness is Critical <a href="http://cfbt-us.com/wordpress/?p=50">http://cfbt-us.com/wordpress/?p=50</a>	Examination of a flashover in a small single family dwelling experienced by the Riverdale Volunteer Fire Department in Prince Georges County Maryland based on a series of four photos.
081211	Outstanding Performance <a href="http://cfbt-us.com/wordpress/?p=56">http://cfbt-us.com/wordpress/?p=56</a>	This post examines the relationship between deliberate practice and expertise. Going to fires is not enough, firefighters and fire officers require deliberate practice and the accompanying feedback to attain superior performance.
081215	Reading the Fire 2 <a href="http://cfbt-us.com/wordpress/?p=57">http://cfbt-us.com/wordpress/?p=57</a>	The second in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a C-Fire showing developing conditions on Sides C and A.
081218	Developing & Using Case Studies: Pennsylvania Duplex Fire LODD <a href="http://cfbt-us.com/wordpress/?p=58">http://cfbt-us.com/wordpress/?p=58</a>	This post discusses the use of case studies as an element of deliberate practice and is the first in a series of posts based on a line of duty death (LODD) in a duplex fire in Grove City, PA. This case is based on <a href="http://www.niosh.gov/publications/NIOSH%20Report%20F2008-06">NIOSH Report F2008-06</a> .
081222	Pennsylvania Duplex Fire LODD: Firefighting & Firefighter Rescue Operations <a href="http://cfbt-us.com/wordpress/?p=63">http://cfbt-us.com/wordpress/?p=63</a>	The second is a series of posts examining a line of duty death (LODD) in a duplex fire in Grove City, PA; this post examines firefighting and firefighter rescue operations conducted during this incident. This case is based on <a href="http://www.niosh.gov/publications/NIOSH%20Report%20F2008-06">NIOSH Report F2008-06</a> .
081225	Pennsylvania Duplex Fire LODD: Analysis of Contributing Factors <a href="http://cfbt-us.com/wordpress/?p=64">http://cfbt-us.com/wordpress/?p=64</a>	This post examines the factors contributing to a line of duty death (LODD) in a duplex fire in Grove City, PA. This includes discussion of the factors identified in <a href="http://www.niosh.gov/publications/NIOSH%20Report%20F2008-06">NIOSH Report F2008-06</a> as well as other factors not identified by NIOSH.

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081229	Pennsylvania Duplex Fire LODD: Analysis of NIOSH Recommendations <a href="http://cfbt-us.com/wordpress/?p=65">http://cfbt-us.com/wordpress/?p=65</a>	This is the fourth post related to a line of duty death (LODD) that occurred in a duplex fire in Grove City, PA. This post examines and critiques the recommendations made in <a href="#">NIOSH Report F2008-06</a> .
090101	Looking Forward to 2009: 10,000 Hours to Master Your Craft <a href="http://cfbt-us.com/wordpress/?p=71">http://cfbt-us.com/wordpress/?p=71</a>	This post examines the line of duty deaths (LODD) in 2008 that resulted from extreme fire behavior and offers six resolutions to improve firefighters and fire officer fire behavior expertise through deliberate practice.
090105	Estimating Required Fire Flow: The National Fire Academy Formula <a href="http://cfbt-us.com/wordpress/?p=74">http://cfbt-us.com/wordpress/?p=74</a>	Detailed examination of the origin, application, and limitations of the National Fire Academy (NFA) fire flow formula.
090108	Estimating Required Fire Flow: The Iowa Formula <a href="http://cfbt-us.com/wordpress/?p=75">http://cfbt-us.com/wordpress/?p=75</a>	Examination of the origin, application, and limitations of the Iowa (Royer/Nelson) fire flow formula.
090112	Reading the Fire 3 <a href="http://cfbt-us.com/wordpress/?p=79">http://cfbt-us.com/wordpress/?p=79</a>	The third in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a R-Fire in Toronto, Canada as firefighters are surprised by rapid fire development after entering Floor 2.
090115	Residential Fire Backdraft: Kernersville, North Carolina <a href="http://cfbt-us.com/wordpress/?p=81">http://cfbt-us.com/wordpress/?p=81</a>	Examination of an explosion that occurred during an R-Fire in Kernersville, NC. Investigators speculated that the explosion resulted from a backdraft in a void space beneath the house.
090119	Fuel & Ventilation <a href="http://cfbt-us.com/wordpress/?p=82">http://cfbt-us.com/wordpress/?p=82</a>	Exploration of heat of combustion, heat release rate, and the relationship between oxygen and combustion (Thornton's Rule). These scientific concepts are tied to the hazards presented by ventilation controlled fires.
090122	Fire Extinguishment a Historical Perspective <a href="http://cfbt-us.com/wordpress/?p=86">http://cfbt-us.com/wordpress/?p=86</a>	This post presents a letter to the editor that appeared in the 1877 Scientific American magazine. The author of the letter advocated for the use of water spray for fire extinguishment (rather than more common solid stream nozzles).

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090126	Myth of the Self Vented Fire <a href="http://cfbt-us.com/wordpress/?p=94">http://cfbt-us.com/wordpress/?p=94</a>	Horizontal ventilation can be an effective tactic, but has significant limitations. This post examines the influence of horizontal ventilation on fire behavior (particularly when the fire creates its own opening).this post draws on data from the National Institute for Standards and Technology (NIST) report <a href="#">Effect of Positive Pressure ventilation on a Room Fire</a> (Kerber & Walton, 2005)  <b>Remember the Past</b> FF Vencent Acey, & FF John Redmond, Philadelphia Fire Department, PA, 28 January 94 FF Victor Melendy, Stoughton Fire Department, MA, 28 January 95 CAPT Walter Gass, Sealey Volunteer Fire Department, TX, 27 January 00
090129	Water and Other Extinguishing Agents <a href="http://cfbt-us.com/wordpress/?p=116">http://cfbt-us.com/wordpress/?p=116</a>	Review the text <i>Water and Other Extinguishing Agents</i> by Stefan Särdaqvist.
090202	Visualizing Fuel Packages <a href="http://cfbt-us.com/wordpress/?p=125">http://cfbt-us.com/wordpress/?p=125</a>	Discussion of the importance of being able to visualize building contents such as furniture as fuel packages. This post examines the potential heat release rate (HRR) from a typical sofa and influence of transition to a ventilation controlled burning regime.
090205	Reading the Fire 4 <a href="http://cfbt-us.com/wordpress/?p=135">http://cfbt-us.com/wordpress/?p=135</a>	The fourth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a R-Fire and ventilation induced flashover.
090209	Shielded Fires <a href="http://cfbt-us.com/wordpress/?p=160">http://cfbt-us.com/wordpress/?p=160</a>	This post examines tests conducted by the U.S. Navy on control of shielded fires. These tests were conducted on the USS Shadwell. Specific comparisons are made between straight stream and pulsed water fog.
090212	Shielded Fires Part 2 <a href="http://cfbt-us.com/wordpress/?p=189">http://cfbt-us.com/wordpress/?p=189</a>	This is the second of two posts examining U.S. Navy tests on control of shielded fires. This post summarizes the Navy findings and examines the impact of water that undergoes phase change (water to steam) in the hot gas layer.  <b>Remember the Past</b> FF/EMT-PPatrick King & FF Anthony Lockhart, Chicago FD, 11 February 98 FF EMT-P Apprentice Rachael Wilson, Baltimore FD 9 February 07

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090216	Live Fire Training: Remember Rachael Wilson <a href="http://cfbt-us.com/wordpress/?p=203">http://cfbt-us.com/wordpress/?p=203</a>	This is the first in a series of posts that examine the circumstances surrounding the death of Firefighter Paramedic Apprentice Rachael Wilson during live fire training in an acquired structure in Baltimore, MD. Information from <a href="#">NIOSH F2007-09</a> and Baltimore City Independent Investigation Report.
090219	Live Fire Training Part 2: Remember Rachael Wilson <a href="http://cfbt-us.com/wordpress/?p=217">http://cfbt-us.com/wordpress/?p=217</a>	This is the first in a series of posts that examine the circumstances surrounding the death of Firefighter Paramedic Apprentice Rachael Wilson during live fire training in an acquired structure in Baltimore, MD. This post addresses the specific events involved in this line of duty death (LODD) Information from <a href="#">NIOSH F2007-09</a> and Baltimore City Independent Investigation Report.
090223	Reading the Fire 4 <a href="http://cfbt-us.com/wordpress/?p=228">http://cfbt-us.com/wordpress/?p=228</a>	The fourth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Photo of a R-Fire in Leominster, MA showing conditions at the door (entry point).
090226	Fire Gas Ignitions <a href="http://cfbt-us.com/wordpress/?p=239">http://cfbt-us.com/wordpress/?p=239</a>	This post introduces the concept of an ontology for extreme fire behavior phenomena and examines fire gas ignitions in the context of an extreme fire behavior event that occurred during an R-Fire in Omaha, NE.
090302	Wind Driven Fires <a href="http://cfbt-us.com/wordpress/?p=260">http://cfbt-us.com/wordpress/?p=260</a>	In 2007 and 2008, the National Institute of Standards and Technology (NIST) Building Fire Research Lab investigated firefighting tactics under wind driven conditions. This post examines conditions used for experiments conducted at NIST's Large Fire Test Facility and provides a brief overview of important findings.
090305	NIST Wind Driven fire Experiments: Establishing a Baseline <a href="http://cfbt-us.com/wordpress/?p=268">http://cfbt-us.com/wordpress/?p=268</a>	This post continues provides an overview of baseline tests in the National Institute of Standards and Technology's investigation of firefighting tactics under wind driven conditions. Of particular interest were changes in heat release, oxygen concentration, and total hydrocarbons in the hot gas layer.
090309	NIST Wind Driven Fire Experiments: Anti-Ventilation Wind-Control Devices <a href="http://cfbt-us.com/wordpress/?p=281">http://cfbt-us.com/wordpress/?p=281</a>	This post first reviews answers to questions posed in <i>Establishing a Baseline</i> . The post then goes on to examine the potential influence of wind on fire behavior and outcome of National Institute of Standards and Technology (NIST) experiments on the impact of wind control devices used for anti-ventilation under wind driven fire conditions.

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090312	NIST Wind Driven Fire Experiments: Wind-Control Devices & Fire Suppression <a href="http://cfbt-us.com/wordpress/?p=292">http://cfbt-us.com/wordpress/?p=292</a>	This post reviews answers to questions posted in <i>Anti Ventilation Wind-Control Devices</i> . In addition, it examines the outcome of National Institute of Standards and Technology (NIST) experiments on integrated application of wind control devices and exterior fire suppression.
090316	Wind Driven Fires: Tactical Problem <a href="http://cfbt-us.com/wordpress/?p=309">http://cfbt-us.com/wordpress/?p=309</a>	This post first examines answers to question posed in Wind Control Devices and Fire Suppression and then presents a simple tactical problem involving a R-Fire with potential for wind driven fire conditions.  <b>Remember the Past</b> CAPT John Drennan, FF James Young, FF Christopher Seidenburg FDNY (Watts Street) 29 March 94 FF Oscar Armstrong, Cincinnati, OH 21 March 03
090119	Language & Understanding: Extreme Fire Behavior <a href="http://cfbt-us.com/wordpress/?p=328">http://cfbt-us.com/wordpress/?p=328</a>	This post examines the wide variation in definition of terms related to extreme fire behavior such as flashover, backdraft, fire gas ignition, smoke explosion, and flash fire.
090323	15 Years Ago: Backdraft at 62 Watts Street <a href="http://cfbt-us.com/wordpress/?p=337">http://cfbt-us.com/wordpress/?p=337</a>	Examination of an extreme fire behavior incident that resulted in the deaths of three FDNY members in 1994. This incident was unique due to the nature of the indicators presented and duration of the subsequent backdraft.
090326	62 Watts Street: Modeling the Backdraft <a href="http://cfbt-us.com/wordpress/?p=361">http://cfbt-us.com/wordpress/?p=361</a>	This post examines modeling of the Watts Street backdraft by Richard Bukowski of the National Institute for Standards and Technology (NIST) Building Fire Research Laboratory (BFRL) and connections between model output and actual incident conditions.
090330	Reading the Fire 5 <a href="http://cfbt-us.com/wordpress/?p=380">http://cfbt-us.com/wordpress/?p=380</a>	The fifth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a C-Fire in Providence, RI.
090402	Extreme Fire Behavior: An Organizational Scheme (Ontology) <a href="http://cfbt-us.com/wordpress/?p=399">http://cfbt-us.com/wordpress/?p=399</a>	Introduction of an organizational scheme for extreme fire behavior phenomena. This ontology classifies phenomena on the basis of outcome and requisite conditions.
090406	Gas Explosions <a href="http://cfbt-us.com/wordpress/?p=421">http://cfbt-us.com/wordpress/?p=421</a>	In order to lay a foundation for discussion of explosive compartment fire behavior phenomena, this post examines basic concepts related to flammability and ignition of fuel/air mixtures.
090413	Gas Explosions-Part 2 <a href="http://cfbt-us.com/wordpress/?p=430">http://cfbt-us.com/wordpress/?p=430</a>	This post continues discussion of gas explosions, discussing the influence of where ignition of the fuel/air mixture occurs, pressure generated, thermal effects, and potential structural impact.

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090416	Reading the Fire 6 <a href="http://cfbt-us.com/wordpress/?p=439">http://cfbt-us.com/wordpress/?p=439</a>	<p>The sixth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a R-Fire in New Milford, NJ</p> <p><b><i>Remember the Past</i></b></p> <p>CAPT James Harlow &amp; FF Damion Hobbs, Houston Fire Department, Texas, 12 April 2009</p> <p>LT Michael Mathis &amp; PVT William Bridges, Memphis Fire Department, Tennessee, 11 April 1994</p> <p>FF Kyle Robert Wilson, Prince William County Department of Fire and Rescue, Virginia, 16 April 2007</p>
090420	International Fire Instructors Workshop & Firefighting Safety Conference <a href="http://cfbt-us.com/wordpress/?p=448">http://cfbt-us.com/wordpress/?p=448</a>	<p>This post provides an overview of the origin of the Institution of Fire Engineers (IFE) Compartment Firefighting Special Interest Group (SIG) and meeting to be held in Sydney, Australia in April 2009.</p>
090423	NIOSH Death in the Line of Duty Report F2007-28 <a href="http://cfbt-us.com/wordpress/?p=460">http://cfbt-us.com/wordpress/?p=460</a>	<p>Providing a quick overview of National Institute for Occupational Safety and Health (NIOSH) <a href="#">Death in the Line of Duty Report F2007-28</a>, this post points to two important recommendations: 1) Ensuring that firefighters understand the influence of positive pressure ventilation (PPV) on fire behavior and 2) increasing fire behavior requirements in professional qualifications standards (e.g., National Fire Protection Association (NFPA 1001, 1021).</p>
090427	A Community of Practice <a href="http://cfbt-us.com/wordpress/?p=471">http://cfbt-us.com/wordpress/?p=471</a>	<p>A report from the 2009 Institution of Fire Engineers (IFE) Compartment Firefighting Special Interest Group (SIG) meeting in Sydney, Australia. This post looks at the importance of international collaboration between firefighters and scientists to improve our understanding of fire behavior and firefighting methods.</p>
090430	Culture of Safety or Culture of Extinguishment <a href="http://cfbt-us.com/wordpress/?p=477">http://cfbt-us.com/wordpress/?p=477</a>	<p>This post provides a response to LT Ray McCormack's 2009 Fire Department Instructors Conference (FDIC) keynote presentation claiming the fire service needs a "culture of extinguishment not safety".</p>
090504	Training Fires and "Real" Fires <a href="http://cfbt-us.com/wordpress/?p=485">http://cfbt-us.com/wordpress/?p=485</a>	<p>The dominant common theme identified by participants in the 2009 Institution of Fire Engineers (IFE) Compartment Firefighting Special Interest Group meeting, was the need for firefighters and fire officers to have a solid understanding of fire dynamics and the ability to apply that knowledge in an operational context. This post examines key differences between the training and operational context and introduces the concept of live fire training as simulation.</p>



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090507	Contra Costa County LODD <a href="http://cfbt-us.com/wordpress/?p=497">http://cfbt-us.com/wordpress/?p=497</a>	This is the first in a series of posts examining the fire behavior and tactical operations involved in an incident at 149 Michele Drive in San Pablo (Contra Costa County) that resulted in the deaths of Captain Matthew Burton and Engineer Scott Desmond. The case study is based on the <a href="#">Contra Costa County Fire Protection District Investigative Report</a> , NIOSH <a href="#">Death in the Line of Duty Report 2007-28</a> and video taken by a Firefighter assigned to Quint 76 (Q76). This post examines the building, dispatch information, and conditions on arrival.
090511	Contra Costa County LODD: Part 2 <a href="http://cfbt-us.com/wordpress/?p=515">http://cfbt-us.com/wordpress/?p=515</a>	This post continues examination of the incident at 149 Michele Drive in San Pablo (Contra Costa County) that resulted in the deaths of Captain Matthew Burton and Engineer Scott Desmond. The case study is based on the <a href="#">Contra Costa County Fire Protection District Investigative Report</a> , NIOSH <a href="#">Death in the Line of Duty Report 2007-28</a> and video taken by a Firefighter assigned to Quint 76 (Q76). Discussion focuses on firefighting operations, key fire behavior indicators, and firefighter rescue operations implemented after Captain Burton and Engineer Desmond were discovered after rapid fire progression in the area in which they were searching.
090514	Contra Costa County LODD: What Happened <a href="http://cfbt-us.com/wordpress/?p=524">http://cfbt-us.com/wordpress/?p=524</a>	This post continues examination of the incident at 149 Michele Drive in San Pablo (Contra Costa County) that resulted in the deaths of Captain Matthew Burton and Engineer Scott Desmond. This post extends the information contained in the <a href="#">Contra Costa County Fire Protection District Investigative Report</a> , NIOSH <a href="#">Death in the Line of Duty Report 2007-28</a> and video taken by a Firefighter assigned to Quint 76 (Q76) by presenting a hypothesis as to how fire development and tactical operations influenced the occurrence of extreme fire behavior..
090518	Positive Pressure Ventilation: Did You Ever Wonder Why? <a href="http://cfbt-us.com/wordpress/?p=535">http://cfbt-us.com/wordpress/?p=535</a>	Did you ever wonder why the size and location of the exhaust opening is critical to safe and effective use of positive pressure ventilation? This is the first in a series of posts examining positive pressure ventilation (PPV) and answers to this important question.
090521	Positive Pressure Ventilation: Inadequate Exhaust <a href="http://cfbt-us.com/wordpress/?p=541">http://cfbt-us.com/wordpress/?p=541</a>	This post continues discussion of positive pressure ventilation and the potential negative impact of turbulence resulting from inadequate exhaust, particularly under ventilation controlled conditions.

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090525	Positive or Negative: Perspectives on Tactical Ventilation <a href="http://cfbt-us.com/wordpress/?p=548">http://cfbt-us.com/wordpress/?p=548</a>	This post reviews articles on positive pressure ventilation written by Watch Manager Gary West of the Lancashire (UK) Fire and Rescue Service (Positive Thinking) and Battalion Chief Kriss Garcia of the Salt Lake City Fire Department (The Power of Negative Thinking).
090528	Reading the Fire 7 <a href="http://cfbt-us.com/wordpress/?p=553">http://cfbt-us.com/wordpress/?p=553</a>	The sixth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a R-Fire (Row House) in Baltimore, MD <b>Remember the Past</b> FF Lewis Jefferson Matthews, FF Anthony Sean Phillips, Sr., District of Columbia Fire Department (Cherry Road) 30 May 1999 FF Alberto Tirado, Passaic Fire Department, New Jersey, 9 May 2001
090601	Evaluating Firefighting Tactics Under Wind Driven Conditions <a href="http://cfbt-us.com/wordpress/?p=573">http://cfbt-us.com/wordpress/?p=573</a>	Review of a DVD based training package that examines research conducted by the National Institute for Standards and Technology (NIST) along with the Chicago Fire Department and Fire Department of the City of New York (FDNY) on firefighting tactics under wind driven conditions.
090604	Live Fire Training Fatalities <a href="http://cfbt-us.com/wordpress/?p=579">http://cfbt-us.com/wordpress/?p=579</a>	This post examines common recommendations in NIOSH Death in the Line of Duty <a href="#">Reports 2008-30</a> and <a href="#">2008-36</a> , both of which examined incidents in which firefighters lost their lives during or immediately after live fire training. Personal as well as organizational responsibility for wellness and a proactive approach to health and safety is emphasized.
090608	Reading the Fire: How to Improve Your Skills <a href="http://cfbt-us.com/wordpress/?p=586">http://cfbt-us.com/wordpress/?p=586</a>	Introduction to a series of posts focused on development of fire behavior indicators (FBI) concept maps as a tool to improve skill in reading the fire.
090611	Live Fire Training: Purpose Built Structures <a href="http://cfbt-us.com/wordpress/?p=607">http://cfbt-us.com/wordpress/?p=607</a>	Review and response to Kriss Garcia's and Reinhard Kauffmann's <a href="#">Realistic Live Burn Training You Can Afford</a> published in the May 2009 issue of <a href="#">Fire Engineering</a> . This post emphasizes the importance of making a connection between purpose and design of live fire training facilities.
090615	Be Safe! <a href="http://cfbt-us.com/wordpress/?p=615">http://cfbt-us.com/wordpress/?p=615</a>	Review of IAFC Recommendations for the 2009 Fire & EMS Safety, Health, and Survival Week and addition of recommendations related to understanding of fire dynamics, reduction of exposure to products of combustion, and leadership accountability.

## CFBT Blog Post Index

Date	Title/Link	Narrative
090618	Reading the Fire: Building Factors <a href="http://cfbt-us.com/wordpress/?p=620">http://cfbt-us.com/wordpress/?p=620</a>	The first of three posts examining the building factors category of fire behavior indicator. This post reviews the B-SAHF (building, smoke, air track, heat, and flame) organizational scheme and provides a starting point for developing a building factors concept map.  <b>Remember the Past</b> FF John J. Downing, Ladder 163, FF Brian D. Fahey, Rescue 4, FF Harry S. Ford, Rescue 3 Fire Department City of New York, 17 June 2001
090622	Sudden Blast <a href="http://cfbt-us.com/wordpress/?p=645">http://cfbt-us.com/wordpress/?p=645</a>	This post briefly reviews an article by Firefighter Eric Kirk describing a near-miss incident involving a smoke explosion in the June 2009 issue of <a href="#">FireRescue</a> magazine. The post also expands on the side bar to the article which provides and explanation of the smoke explosion phenomena.
090625	Reading the Fire: Building Factors Part 2 <a href="http://cfbt-us.com/wordpress/?p=651">http://cfbt-us.com/wordpress/?p=651</a>	The second of three posts addressing the building factors category of fire behavior indicators (FBI). Three video clips are presented along with a series of question focused on identifying building factors that influence fire behavior. This post also provides the opportunity for more holistic practice at reading the fire.
090629	Florida Live Fire Training Instructor (LFTI) <a href="http://cfbt-us.com/wordpress/?p=658">http://cfbt-us.com/wordpress/?p=658</a>	This post provides a review and critique of the Florida State Fire College's Live Fire Training Instructor (LFTI) Course. In addition, suggestions are provided to strengthen this excellent course through addition of content focused on fire dynamics.
090702	Reading the Fire: Building Factors Part 3 <a href="http://cfbt-us.com/wordpress/?p=665">http://cfbt-us.com/wordpress/?p=665</a>	This post concludes a three part series addressing the building factors category of fire behavior indicators (FBI) and includes a revised and expanded building factors concept map.
090706	Live Fire Training: Important Questions <a href="http://cfbt-us.com/wordpress/?p=698">http://cfbt-us.com/wordpress/?p=698</a>	This post examines live fire training as a simulation and uses a comparison with flight simulation to identify the elements of fidelity necessary to provide effective training. A puzzle dealing with fire dynamics in a container based prop is also presented to highlight how fidelity limitations can impact training effectiveness (positively or negatively).
090709	Reading the Fire: Smoke Indicators <a href="http://cfbt-us.com/wordpress/?p=710">http://cfbt-us.com/wordpress/?p=710</a>	The first of two posts examining the smoke category of fire behavior indicators (FBI). The post differentiates between smoke and air track indicators and major sub-categories of smoke indicators are identified.

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Date	Title/Link	Narrative
090713	Reading the Fire 8 <a href="http://cfbt-us.com/wordpress/?p=720">http://cfbt-us.com/wordpress/?p=720</a>	The eighth in an ongoing series of video (or photo) based exercises to develop skill in reading the fire. Tied to application of the B-SAHF organizing scheme for Fire Behavior Indicators (FBI). Video of a C-Fire in Safety Harbor, FL. This post also connects to Reading the Fire: Smoke Indicators.
090716	Live Fire Simulations: Key Elements of Fidelity <a href="http://cfbt-us.com/wordpress/?p=724">http://cfbt-us.com/wordpress/?p=724</a>	This post examines physical fidelity (the extent to which the simulation looks and feels real) in live fire simulation. In addition, the puzzle presented in <a href="#">Live Fire Training: Important Questions</a> is used to open discussion of functional fidelity (realistic functioning of the simulation).
090720	Reading the Fire: Smoke Indicators Part 2 <a href="http://cfbt-us.com/wordpress/?p=730">http://cfbt-us.com/wordpress/?p=730</a>	This post continues examination of the smoke category of fire behavior indicators (FBI), examining sub-categories and providing an revised and expanded smoke indicators concept map.
090723	Live Fire Simulations: Key Elements of Fidelity Part 2 <a href="http://cfbt-us.com/wordpress/?p=740">http://cfbt-us.com/wordpress/?p=740</a>	This second post examining fidelity in live fire training simulations addresses functional fidelity (the extent to which the simulation works and reacts realistically). Multiple sub-systems are identified including the firefighter, personal protective equipment, fire dynamics, the fire suppression system, and system latency.  <b><i>Remember the Past</i></b> CAPT Matthew Charles Burton and ENG Scott Peter Desmond, Contra Costa County Fire Protection District, California, 21 July 2007
090727	Reading the Fire: Air Track Indicators <a href="http://cfbt-us.com/wordpress/?p=745">http://cfbt-us.com/wordpress/?p=745</a>	This post examining the Air Track category of fire behavior indicators (FBI). The post identifies major air track indicators and lays a foundation for future exploration.
090730	Understanding Flashover: Myths & Misconceptions <a href="http://cfbt-us.com/wordpress/?p=759">http://cfbt-us.com/wordpress/?p=759</a>	This is the first of several posts examining flashover, what it is, how it happens, requisite conditions, and mitigation strategies. This post focuses on flashover and fire development.
090803	Reading the Fire: Air Track Indicators <a href="http://cfbt-us.com/wordpress/?p=769">http://cfbt-us.com/wordpress/?p=769</a>	Sub-categories of air track indicators are examined in detail. This post also provides a revised and expanded air track indicators concept map.
090806	Understanding Flashover: Myths & Misconceptions Part 2 <a href="http://cfbt-us.com/wordpress/?p=775">http://cfbt-us.com/wordpress/?p=775</a>	The second in this series of posts on flashover examines the relationship between flashover and ventilation, examining the concept of ventilation induced flashover.