Workshop on Key Performance Capabilities and Competencies for High Hazard Incident Commanders

Workshop Facilitated & Executive Summary Prepared By:

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Signal Mountain, TN

Held: 2 & 3 November 2016, NFPA Conference Center, Quincy, MA

December 2016
Executive Summary

This report is focused on the outcomes from the workshop on **Key performance capabilities and competencies for High hazard Incident commander** conducted in conjunction with HAZMAT Incident commander workshop (addressed in separate proceedings) at NFPA Headquarters Conference Center on November 2 & 3, 2016.

Several emergency high hazard incidents have been occurring in North America. These incidents often involve a complex interaction with various governmental and agency authorities, first responders, and industry personnel. Experience has shown that local personnel often do not have adequate in-depth knowledge of the hazard or response techniques, thereby taxing the ability of local responders to manage the incident in a safe and effective manner. NFPA standards are written in a broad perspective - establishing a framework that can be applied to a wide range of incidents. There is a sense of urgency to meet the needs of the first responder and the public’s awareness for professional thinking and leadership.

The goal of this workshop is to develop a competency framework with an in-depth analysis and a planned approach for exploring and validating opportunities to synthesize this concept into the professional qualifications standards.
Acknowledgements

This workshop was supported by Pipeline and Hazardous Materials Safety Administration (PHMSA), (U. S. Department of Transportation) grant for the project on Enhancing Incident Commander Competencies for Management of Incidents Involving Pipeline and Rail Car Spills of Flammable Liquids.

This workshop was facilitated and the executive summary report was prepared by David Hooton, Ed. D, Signal Mountain, TN. The workshop report has been prepared by Sreenivasan Ranganathan, Fire Protection Research Foundation, Quincy, MA. The information contained herein is based on the input of numerous professionals and subject-matter-experts. While considerable effort has been taken to accurately document this input, the final interpretation of the information contained herein resides with the report author. The content, opinions and conclusions contained in this report are solely those of the authors and do not necessarily represent the views of the Fire Protection Research Foundation, NFPA, Technical Panel or Sponsors. The Foundation makes no guaranty or warranty as to the accuracy or completeness of any information published herein.

About the Fire Protection Research Foundation
The Fire Protection Research Foundation plans, manages, and communicates research on a broad range of fire safety issues in collaboration with scientists and laboratories around the world. The Foundation is an affiliate of NFPA.

About the National Fire Protection Association (NFPA)
Founded in 1896, NFPA is a global, nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. The association delivers information and knowledge through more than 300 consensus codes and standards, research, training, education, outreach and advocacy; and by partnering with others who share an interest in furthering the NFPA mission. All NFPA codes and standards can be viewed online for free. NFPA's membership totals more than 65,000 individuals around the world.
Keywords: Competency, Ideation, HAZMAT, High Hazard, Incident Commander, Emergency, Rail road, Crude oil, Flammable liquid, Professional qualification, Pipeline, First Responders.

Report number: FPRF-2016-30
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1) Background and Overview

Background:

There have been several emergency high hazard incidents occurring in North America. These incidents often involve a complex interaction with various governmental and agencies authorities, first responders, and industry personnel. Experience has shown that local personnel often do not have adequate in-depth knowledge of the hazard or response techniques, thereby taxing the ability of local responders to manage the incident in a safe and effective manner. NFPA standards are written in a broad perspective - establishing a framework that can be applied to a wide range of incidents. To manage and coordinate incidents, the incident commander needs the tools to plan and implement an incident action plan. There is a sense of urgency to meet the needs of the first responder and the public’s awareness for professional thinking and leadership.

Workshop Goal:

The goal of the workshop was to develop a competency framework with an in-depth analysis and a planned approach for exploring and validating opportunities to synthesize this concept into the professional qualifications standards. This workshop was conducted in conjunction with HAZMAT Incident commander workshop to review, clarify and confirm tools for incident commander to manage events involving pipeline and rail car spills of crude oil.

Workshop Agenda:

The two day workshop agenda for HAZMAT Incident commander workshop and the workshop segments focused on the Key Performance Capabilities and Competencies for High Hazard Incident Commanders are as follows. This report is focused on the outcomes from the highlighted sections in the agenda below.

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Description</th>
<th>Speakers/Participants</th>
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<tbody>
<tr>
<td>0730 – 0830</td>
<td>Workshop registration/Breakfast</td>
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<tr>
<td>0830 – 0900</td>
<td>Call to order, Workshop overview Welcome</td>
<td>Casey Grant, FPRF Jim Pauley, NFPA Arthur Buff, PHMSA/DOT Transport Canada Nicole Girard, Transport Canada</td>
</tr>
<tr>
<td>0915 – 1015</td>
<td>Managing the HAZMAT Incident and HHFT IC</td>
<td>Greg Noll, Noll Associates</td>
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<tr>
<td>1015 – 1030</td>
<td>Break</td>
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<tr>
<td>1030 - 1100</td>
<td>Flammable Liquid Pipeline IC</td>
<td>Greg Noll, Noll Associates</td>
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<td>1100 - 1130</td>
<td>Competency Guidelines</td>
<td>Chris Powers</td>
</tr>
<tr>
<td>1130 - 1200</td>
<td>Electronic Application Tool – HAZMAT FLIC app</td>
<td>James Li, Thunkable</td>
</tr>
<tr>
<td>1200 - 0100</td>
<td>Lunch Break</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
<td>Presenter(s)</td>
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<td>----------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
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<tr>
<td>0100 – 0130</td>
<td>Job Performance Requirement (JPR) - NFPA Pro-Qual Documents</td>
<td>Bill Peterson &amp; Doug Forsman</td>
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<tr>
<td>0130 – 0230</td>
<td>Competencies, Capabilities &amp; Complexity</td>
<td>David Hooton</td>
</tr>
<tr>
<td>0230 - 0245</td>
<td>Break</td>
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<tr>
<td>0245 - 0345</td>
<td>Competencies, Capabilities &amp; Complexity (continued)</td>
<td>David Hooton</td>
</tr>
<tr>
<td>0345 - 0400</td>
<td>Day 1 - Summary/wrap up</td>
<td>Tom McGowan, NFPA</td>
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</table>

### Key Performance Capabilities for Hazardous Materials Incident Commanders

#### Day 2: Key Performance Capabilities for Hazardous Materials Incident Commanders

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter(s)</th>
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</thead>
<tbody>
<tr>
<td>0730 - 0830</td>
<td>Breakfast</td>
<td></td>
</tr>
<tr>
<td>0830 - 0900</td>
<td>Day 1 Review &amp; Day 2 Overview</td>
<td>Tom McGowan, NFPA</td>
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<tr>
<td>0900 - 1045</td>
<td>HH-IC Key Performance Capabilities</td>
<td>David Hooton</td>
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<tr>
<td>1045 - 1100</td>
<td>Break</td>
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<tr>
<td>1100 - 1215</td>
<td>Ideation Spark Session: Integrating KPC with NFPA Standards</td>
<td>David Hooton</td>
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<tr>
<td>1215 - 0100</td>
<td>Lunch Break</td>
<td></td>
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<tr>
<td>0100 - 0115</td>
<td>Foam application rate for HHFT incidents</td>
<td>Ken Willette, NFPA</td>
</tr>
<tr>
<td>0115 - 0200</td>
<td>Workshop – Summary &amp; Wrap-up</td>
<td>Tom McGowan (NFPA) &amp; Casey Grant (FPRF)</td>
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</table>

The other portions (not highlighted above) of this workshop agenda are addressed and summarized in a separate proceedings report titled *HAZMAT Incident Commander Workshop.*
2) Session Overview

David Hooton, Ed. D., facilitated the breakout sessions on competencies and capabilities for incident commanders. David extensively worked with the ProQual Correlating Committee and many ProQual technical committees when they converted to Job Performance Requirements, has served on 1033 and 921, and also consulted with NFPA on their training outreach. Additionally, he has worked with volunteer fire departments, HazMat teams, and in EMS serving many roles, including Chief. He earned his doctorate from Vanderbilt University.

Breakout Groups: The main part of the workshop program was the panel discussions and activities. The purpose of these panel discussions was to focus on several specific topics that were perceived to be points of future planning. Overview of Workshop panel discussion groups are as follows:

Table 2: Overview of panels for breakout sessions

<table>
<thead>
<tr>
<th>Group</th>
<th>Panelists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Greg Noll; Lisa Hartman; Brian Brauer; Chris Engrissei; Bradley Hoekstra; Nicole Girard</td>
</tr>
<tr>
<td>Group 2</td>
<td>Bill Peterson; Bob Fash; Larry Preston; Dan Simpson; Steve Fitzgerald; Clem Schimikowski</td>
</tr>
<tr>
<td>Group 3</td>
<td>Doug Forsman; Gordon Descutner; Derek Lampkin; Chris Powers; Pete Jensen; Casey Grant</td>
</tr>
<tr>
<td>Group 4</td>
<td>Louis Marcotte; Ed Conlin; Frederick Piechota; Dan Gorham; Larry Jantzen; Tom McGowan</td>
</tr>
<tr>
<td>Group 5</td>
<td>Tracie Young-Brungard; John Montes; Rick Mason; Manny Ehrlich; Ray Palczynski; Neal Mullane</td>
</tr>
<tr>
<td>Group 6</td>
<td>Fred Terryn; Shayne Mintz; Ken Willette; John Eminnizer; Steve Edwards; William Larkin</td>
</tr>
</tbody>
</table>

Day 1 focused on introduction to Competencies, Capabilities, and Complexity.

Complexity assessment: The session opened with referring to the Ambiguity pre-work survey and the idea to think differently was prompted. Then the complexity structure/model was introduced with the help of complexity model handout (See Figure) to shift thinking about what key Incident Command challenges exist at a High Hazard incidents and how different skill sets beyond the technical skill sets are needed to manage. Every group was asked a question - Are High Hazard incidents complicated or complex, explain? Every team reported out their findings with most of them falling into either complex, complicated and chaotic.
Creating Chaos: The next step was to build on the prior activity with a focus on behaviors by creating lists of mindsets, attitudes, and behavioral actions that would create chaos. The intent was to begin setting the stage for uncovering those biased, experiential mindsets and behaviors that are opposite those needed to handle complex situations. Each team was asked to list and report out – 1) What mindsets or bias help create chaos, 2) What actions and behaviors help create chaos.

Creating Order from Chaos: Following the activity of creating chaos groups were asked to define the opposite mindsets, attitudes, and behaviors. The intent is to begin honing in on the IC leader capabilities needed to handle various phases of an incident, how mindsets and behaviors are different for complicated, complex, and chaotic incidents, requiring agile leader behaviors and skills with a mindset that handles the paradox and paradoxical leadership traits. Every group identified and reported out the top three mindset/behavior needed to move a situation from chaos to complex or complicated and then from complex to complicated.

Homework assignment: Samples of competencies shared on the internet were circulated as handout to participants. The assignment was to spend 20-30 minutes reviewing, reflecting, and indicating with a highlighter or checkmark those competencies that resonate as critical capabilities for a high-hazard Incident Commander. These were used during the session to develop Key Performance Capabilities (KPCs). Please see Appendix D for full homework handouts.

Day 2 sessions focused on HH-IC Key Performance Capabilities and Ideation Spark Sessions: Integrating KPC with NFPA Standards

Capabilities-Beyond Reason & Logic: Day 2 started with a quick overview of the Day 1 and the homework handout. The first activity on Day 2 was to identify critical IC capabilities and align to prepared wheel. Using the “Examples” homework packet, groups were asked to identify or create all the competencies that would apply to the assignment (HH Offensive, Defensive, and Non-intervention). A sample wheel diagram is as shown below:
Each group went on to identify competencies under Complexity Leadership Acumen, Interpersonal Relationship, Adaptive Teams, Planning and Communication. In this discussion, the Technical competency was not discussed. The competency wheels developed by each groups are attached in Appendix B. Chapter 3, following, provides a summary from this Breakout session and documents the outcome from this activity, including each groups list of competencies.

**Ideaion Spark Sessions:** This session focused on integrating Key Performance Capabilities with NFPA Standards and stakeholders. Using Stanford innovation methods, groups created a large number of ideas, selected their top ideas, and built out implementation considerations for these to be later considered when determining a systematic approach to integrating and supporting the HH-IC capabilities. The goal for this session was for teams to come up with as many varied ideas as possible related to three challenge statements:

- How might we visually integrate KPCs into NFPA ProQual 1072, 472, and Field Guides
- How might we help committee members understand and adopt KPCs into their thinking, work, and documents
- How might we accelerate adoption of KPCs with HH incident stakeholders (AHJ, State, Fed, and commercial entities such as rail companies and product owners)
**Breakout sessions Wrap-up:** The breakout sessions were wrapped up by reframing complexity and the need for a different type of a leader in these situations. David discussed that the new Capabilities are fundamental, likely as or more important than technical skills with a few simple rules to guide incident responders. How to think differently and draw from a toolkit of mental constructs across a situation's evolution will become the hallmark of taming chaos and can be leveraged to usher in a new breed of leader and commander.
3) Summary from Breakout Sessions

This section is an executive summary of the breakout and ideation sessions to identify the key performance capabilities and competencies for high hazard incident commanders.
The key objective of this session and the methodology used are as follows:

Facilitate Subject Matter Experts (SME) to identify key competencies and capabilities for Incident Commanders in High Hazard incidents and help determine alternatives for how to integrate with the existing JPRs.

Accomplished by:
1) documents review
2) development of competency assumptions
3) testing these assumptions with SMEs via 1-1 calls
4) creating aligned presentation materials/graphics, activities, activity guides and handouts
5) facilitate a SME workshop,
6) provide a post workshop summary report

Key Objectives

The Journey

Review & Analysis Of Documents
SME Interviews: Bob Ingram Rick Edinger
Workshop Facilitated Nov. 2 & 3
Insights & Assumptions

Workshop Planning and Design Approvals
Summative Report To Foundation
NFPA 1072 2nd Draft
NFPA 472
HHFT Incident Commander Field Guide
LP Pipeline Incident Commander Field Guide
HH Checklists

Several days were spent evaluating the content of these documents, identifying correlations and gaps with potential key capabilities and competencies, and determining opportunities to create alignment with non-NFPA posits and models for managing similar situations.

Document Review

Assumption: the Incident Commander would greatly benefit from understanding how scene dynamics shift and the associated leader competencies for these shifts. The Cynefin Complexity Model, one of many, was selected by Hooton as the best for the workshop due to its simplicity and validation, this model includes simple, complicated, complex, and chaos as the key constructs to frame leader responders related cor.

- The documents are all highly biased to the technical nature of high-hazard incidents.
- A significant gap exists related to competencies that define critical leader traits, such as navigating dynamic shifts at the incident, political savvy, and managing agile teams.
- There might be an opportunity to reduce noise for the IC by re-assessing the qualifications to determine a smaller set of critical competencies that make a real difference in outcomes.
- Research indicates that practice drills and pre-planning are key to “best outcomes;” however, associated documents themselves do not leverage this as a requirement for qualification nor demonstrate emphasis from a response modeling perspective.
- Although the fact that these high-hazard incidents are recognized as being highly complex in nature for various response agencies, complexity theory and models are not included and incident growth models do not reflect these dynamics.
- Agile and complexity models common to leadership well serve as a organizing and meaning making foundation for High-Hazard Incident Commanders and Leaders...both as a framework for KPAs/Competencies and to help these responders to better understand changing dynamics of teams and their needs.

Insights & Assumptions
**Key Interview Outcomes:**

- There are a number of paradoxical elements in HH situations, such as Situational Awareness being most important when it’s least possible.
- These paradoxes deeply contribute to the complexity of IC.
- Different Points of View are highly determined by personalities, experience, and political relationships.
- Whereas many departments don’t list soft-skills, practical assessments often reveal these types of behaviors.
- Pre-planning is key in making differences to drive best possible outcomes because trusted relationships are forged and tactical approaches can be planned in such a way as to afford overcoming nuances related to required, early, and difficult decision making.
- Incident Commanders often have cognitive enrichment based on experience using response schemas that fail in HH situations.
- There are several trigger points for incident’s ‘going south’, including: lack of pre-planning, new officers, limited communications or lack of clarity, poor documentation, not anticipating the different points of view and terminology.
- Strong sense the multi-agency response demands a systematic framework, such as unified command...but also creativity.
- It would be great to tie something like the Cynefin Complexity Model to the Incident Command System.

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**Workshop Planning**

**Workshop Design:**

- **Prework:**
  - Review two Cynefin videos
  - Read HBR article on Complexity and Decision Making

- **Day One (afternoon):**
  - **Understanding Complexity**
    - Activity: Create Chaos
    - Activity: Making Order from Chaos
  - Wrap-up Activity: I used to think, but now I think...
  - Homework assignments

- **Day Two (morning):**
  - Shared Reflections on Homework
  - Activity: Create and present a Competency Wheel for HH Incident Commanders
  - Activity: Ideation/Spark Sessions
    - Three teams, three feet... How might we:
      - Integrate KPCs with NFPA documents
      - Help committees better understand and adopt KPCs
      - Accelerate adoption of KPCs by training and evaluation stakeholders
  - Session: Wrap-up and Final Comments

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The workshop design was sent out for review and approvals prior to becoming final. Both NFPA staff and correlating committee members agreed on the constructs without changes. NFPA staff greatly assisted with creating special handouts and production of copies while tending to the significant amount of administration. Many thanks to these super helpful Foundation staff.
Competency Outcomes

Numerous competencies were identified as relevant during the session, participant/SMEs determined these as the most important in the time allotted.

Challenge Question: How might KPCs be integrated into NFPA Documents?

Top Ideas:
1. Appendix within existing documents as a skill maintenance/currency or re-certification system for JPRs.
2. Develop a ProQual, role specific KPC Modeling Guide that shows how KPCs can be used with other documents; include basic, proficient, and expert.

Ideation Outcomes: Integrate KPCs with NFPA Documents
Challenge Question: How might we help various committee members understand and adapt their thinking and approaches?

Top Three Ideas:
1. Mentoring & Coaching
2. Lean-type idea solicitation and feedback process
3. Provide examples from other professions and show how they benefit the standard and committee members

**Ideation Outcomes: Help Committees better understand and adopt KPCs**

Challenge Question: How might we help training and evaluation organizations/agencies adopt and use KPCs?

Top Three Ideas:
1. Solicit feedback and ideas from multiple stakeholders from previous incidents and/or with knowledge about similar certifications or credentials.
2. Integrate/Collaborate to include in management courses at NETC or the NFA curriculum.
3. Utilize as a ‘command competency’ for career development

**Ideation Outcomes: Accelerate adoption of KPCs by training and evaluation stakeholders**
Basic Opportunities

- Expand competency list and vet with diverse groups outside of the ‘response arena,’ such as leader organizations, companies, expert groups in comparable ‘crisis domains’
- Gather NFPA SME groups to validate, augment, and refine wheel components to better provide a common thread and alignment across roles (beyond IC); basically align with competency wheel design constructs and best practices.
- Future proof competencies within the wheel.
  - ID disruptive and accelerated change
  - Validate KPCs for 10 years out
- Conduct interviews, innovate and develop novel learning opportunities to demonstrate opportunities to ensure adoption.

A Few Disruptive Innovation Opportunities

- Create ‘3 Simple Rules’ for Incident Commanders, based on Donald Sull and Kathleen Eisenhardt’s work at Stanford for thriving in complex worlds.
- Broaden the Foundation’s scope for uncovering unique solutions to better deal with high-hazard incidents so that experts from diverse, yet related, fields can be brought into the fold, e.g. futuring organizations, social network analyst, social physics and economist, team/group psychologist, NeuroLeader experts, etc.
- Apply Design Thinking Innovation methods to develop the Competency Wheel adoption approach and ensure end-user and stakeholder value can be easily recognized.
- Determine novel development approaches and new methods to strengthen ProQual and Standards writing committees’ agility and flex capacity.

IMHO: Opportunities

Next Steps

Review Executive Brief
- Correlate information with other documentation and participant feedback
- Determine if optional debrief is desirable and attendees, if so. Schedule
- Engage others in dialog regarding basic and disruptive opportunities
- Map foreword approach and timelines.

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423.667.5648
• Time both increases and decreases complexity (arc of complexity)
• The more experience an IC has, the less s/he has
• The IC only gains control when control is given away
• Situational awareness is most important when it’s least possible (alt: when the greatest unknowns are rapidly evolving)
• The mere essence of something, anything, changes with every new connection or node (e.g. information nodes)
• Quick decisions thwart fluid uncertainty

High Hazard Incident Paradoxes
Annex A: Workshop Attendees

The following were the full list of workshop attendees on “Workshop on Key Performance Capabilities and Competencies for High Hazard Incident Commanders”, at NFPA Headquarters Conference Center, Quincy, MA on November 2 & 3, 2016.

Arthur Buff, PHMSA/DOT
Bill Peterson, IFSTA
Bradley Hoekstra, Edmonton Fire Rescue Services (EFRS)
Brian Brauer, Illinois Fire Service Institute
Casey Grant, FPRF
Chris Engrissei, Marathon Pipeline LLC.
Chris Powers, Past Chair, Emergency Response Task Force
Clem Schinikowski, Canadian Pacific Railroad
Curt Floyd, NFPA
Dan Gorham, FPRF
Danny Simpson, CN Railways
David Hooton (Facilitator)
Derek Lampkin, BNSF Railway
Doug Forsman, Fairfield Bay Fire Dept.
Ed Conlin, NFPA
Fred Terryn, US Dept. of the Air Force
Frederick Piechota, National Board on Fire Service Pro-Qual
Gordon Descutner, Alaska Fire Standards Council
Greg Noll, Noll Associates
James Li, Thunkable
John Eminnizer, Dept. of Energy & Environment
John Montes, NFPA
Ken Willette, NFPA
Larry Jantzen, Austin Fire Dept.
Larry Preston, Maryland Fire Rescue Institute
Lisa Hartman, NFPA
Louis Marcotte, Transport Canada
Manny Ehrlich, US Chemical Safety Board
Neal Mullane Jr, Boston Fire Dept.
Nicole Girard, Transport Canada
Pete Jensen, Ventura County Fire Dept.
Ray Palczynski, Illinois Fire Service Institute
   Rick Mason, NFFF
   Robert Fash, NFPA
   Shayne Mintz, NFPA
Sreenivasan Ranganathan, FPRF
   Steve Edwards (OSU)
Steve Fitzgerald, HAZMAT Battalion, FDNY
   Tom McGowan, NFPA
Tracie Young-Brungard, PA State Fire Academy
   William Larkin – Jones & Bartlett
Annex B: Competency Wheels Developed by Each Group
Annex C: Homework Examples

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Homework Examples

Pre-work: To get ready for rapid development of the capabilities, you’ll need to do just a little pre-work so that we go deep fast.

Pre-work (total time 20-30m)

a) Complete the embedded short assessment and note your results for our session (you will not be required to share)
   Ambiguity Assessment

Complexity Model Introduction (Cynefin Model)
b) Watch these two short videos, less than 10 minutes
   https://www.youtube.com/watch?v=5mqNcs8mp74&list=PLGnJiUdxGWHuNY_ug9U55ZB8jC2xtcQzO ,
   https://www.youtube.com/watch?v=N7oy366X0-8

c) Read the attached HRB Article on complexity and leadership

Pre-Work Assignments
Homework:
KPC & Competency Samples for Reflections

The following are samples of competencies shared on the Internet. Your assignment is to spend 20-30 minutes reviewing, reflecting, and identifying with a highlighter or checkmark those competencies that resonate with you as critical capabilities for a high-performing student. You can also add any other competencies not listed in the KPCs (Knowledge, Performance, and Competency). There are included examples of how these types of KPCs will be further developed after the semester.

Microsoft Educational Competencies

Lominger-Korn Ferry

Leadership Competencies, Skills and Abilities

1. Advocacy
2. Delegating
3. Analyzing
4. Restraint
5. Staying calm
6. Forecasting
7. Completing tasks
8. Managing time
9. Setting goals
10. Planning
11. Managing people
12. Taking risks
13. Making decisions
14. Evaluating
15. Planning

## DoD-Logistics Division

**Results Driven**

- **Situational Awareness:** Perception of environment, elements, and their relationship, as well as their developing pattern.
- **Risk Management:** Process of identifying, assessing, and promoting their developing pattern.
- **Deployment Planning:** Conceptualization of deployment, tactics and their developing pattern.
- **Critical Thinking:** Decision-making in uncertain situations.

**Logistics Acumen**

- **Deployment Planning:** Operational planning directed toward the movement of forces and materiel, and execution of operations.
- **Joint Theater Logistics Management:** Enables joint forces commanders to improve the effective and efficient use of logistics support.
- **Supply Chain Management:** Conceptual understanding of essential processes that support the planning, scheduling, and execution of logistics operations.

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**Lominger-Korn Ferry**

**The Korn Ferry Leadership Architect™ library**

Based on a review of more recent literature, a consideration of key 21st century trends, and insights from our data, we derived the new Korn Ferry Leadership Architect™ library, which is comprised of 4 Factors, 12 Clusters, and 33 Competencies.

<table>
<thead>
<tr>
<th>FACTOR I: THOUGHT</th>
<th>FACTOR II: RESULTS</th>
<th>FACTOR III: PEOPLE</th>
<th>FACTOR IV: SELF</th>
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<tbody>
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<td>A. Understanding the business</td>
<td>D. Taking initiative</td>
<td>G. Building collaborative relationships</td>
<td>J. Being authentic</td>
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<tr>
<td>J. Creating the new and different in external perspective</td>
<td>9. Ensures accountability</td>
<td>18. Drives engagement</td>
<td>55. Situation awareness</td>
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<tr>
<td>K. Cultivates innovation</td>
<td>10. Drives results</td>
<td>19. Drives organizational strategy</td>
<td>60. Situational adaptability</td>
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<tr>
<td>L. Strategic mindset</td>
<td></td>
<td>20. Drives innovation</td>
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</tbody>
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Lominger-Korn Ferry

Korn Ferry Leadership Architect™ Research guide and technical manual

Sample competency: Manages complexity
Consider the following context for a sample competency: Manages complexity.

**Competency title:** Manages complexity

**Competency definition:** Making sense of complex, high-quantity, and sometimes contradictory information to effectively solve problems.

**Competency Anchored Rating Scales (CARS)**

<table>
<thead>
<tr>
<th>Low skilled</th>
<th>Skilled</th>
<th>Talented</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Misses the complexity of issues and form fixes solutions.</td>
<td>- Asks the right questions to accurately analyze situations.</td>
<td>- Rapidly distinguishes between what’s relevant and what’s irrelevant to make sense of complex situations.</td>
</tr>
<tr>
<td>- Doesn’t gather sufficient information to assess situations completely.</td>
<td>- Analyzes data from multiple and diverse sources when solving problems.</td>
<td>- Looks beyond the obvious and doesn’t settle for the first answer.</td>
</tr>
<tr>
<td>- Relies solely on intuition, even when contrary information exists.</td>
<td>- Identifies root causes to root problems.</td>
<td>- Analyzes multiple and diverse sources of information to define problems accurately before moving to solutions.</td>
</tr>
<tr>
<td>- In some situations, problems surface without an obvious solution.</td>
<td>- Evaluates pros and cons, and benefits and costs of different solution options.</td>
<td></td>
</tr>
</tbody>
</table>

**Stage 4 (Contributes strategically)** BARS (which demonstrate different levels of proficiency).

**Behaviorally Anchored Rating Scales (BARS)**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Model improvement</th>
<th>Model expectations</th>
<th>Highest expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Approaches problems from a systems perspective, defining connections, linkages, and interdependencies.</td>
<td>- Reconnoiters the most obvious sources of a problem without identifying the connections, linkages, or dependencies to other problems.</td>
<td>- Understands the interdependencies of issues, sees the major connections, linkages, and interdependencies of problems.</td>
<td></td>
</tr>
<tr>
<td>- Seeks and uses innovative approaches to solve complex information gathering.</td>
<td>- Identifies efficient, effective, or few resources for information to support understanding the interdependencies of challenges.</td>
<td>- Takes steps to ensure that the organization has the resources and processes in place to garner the information it needs.</td>
<td></td>
</tr>
<tr>
<td>- Anticipates external and internal challenges that the organization may face in the future.</td>
<td>- Acts as an internal almanac, keeping timely, missing opportunities to forecast future challenges.</td>
<td>- Anticipates highly effective strategies and distributes the right resources enable quick, successful information gathering.</td>
<td></td>
</tr>
<tr>
<td>- Synthesizes information from many sources as a broad and deep understanding of complex issue.</td>
<td>- Does not seek multiple sources of different views of information together, maintaining only a general or incomplete understanding of issue.</td>
<td>- Integrates the relevant pieces of information to gain a clear understanding of the issue.</td>
<td></td>
</tr>
<tr>
<td>- Analyses many pieces of information into a cohesive and comprehensive understanding of complex issue.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Emotional Intelligence: A Primer**

Emotional intelligence—the ability to manage oneself and our relationships effectively—is a fundamental capability that includes self-awareness, self-management, social awareness, and social skill. Each capability, in turn, is composed of specific sets of competencies. Below is a list of the capabilities and their corresponding traits.

<table>
<thead>
<tr>
<th>Self-Awareness</th>
<th>Self-Management</th>
<th>Social Awareness</th>
<th>Social Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Emotional self-awareness:</em> the ability to read and understand your emotions as well as recognize their impact on work performance, relationships, and behavior.</td>
<td><em>Self-control:</em> the ability to keep emotions in check and adjust under emotional pressure.</td>
<td><em>Empathy:</em> the ability to understand and share the feelings of others.</td>
<td><em>Visionary leadership:</em> the ability to take charge and move with a compelling vision.</td>
</tr>
<tr>
<td><em>Aversion to discomfort:</em> a realistic evaluation of your strengths and limitations.</td>
<td><em>Transparency:</em> a consistent display of honesty and integrity.</td>
<td><em>Organizational awareness:</em> the ability to read and align the currents of organizational life.</td>
<td><em>Influence:</em> the ability to work a range of persuasive tactics.</td>
</tr>
<tr>
<td><em>Self-confidence:</em> a strong and positive sense of self-worth.</td>
<td><em>Compassion:</em> the ability to manage yourself and your responsibilities.</td>
<td><em>Integrity:</em> the ability to operate with integrity and standards.</td>
<td><em>Developing others:</em> the propensity to refer decisions to others through feedback and guidance.</td>
</tr>
</tbody>
</table>

- **Social Skill**
  - Visionary leadership: the ability to take charge and move with a compelling vision.
  - Influence: the ability to work a range of persuasive tactics.
  - Developing others: the propensity to refer decisions to others through feedback and guidance.
  - Communication: skilled in listening and communicating clear, concise, and effective messages.
  - Change catalytic proficiency: in initiating new ideas and leading people in a new direction.
  - Conflict management: the ability to deal with disagreements and orchestrate resolutions.
  - Building high performance: at multicultural and multinational workplaces.
  - Teamwork and collaboration: competence at promoting cooperation and building teams.
## Annex D: Ideation Worksheets

### Idea Refinement Worksheet

**Idea Name:** Integrate/Utilize MT/NET/C

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporate the concept into existing course curricula at NFA/NET/C</td>
<td>Individuals who are in org. leading positions? Change agents?</td>
</tr>
</tbody>
</table>

- Uniformity/Standardization
- Reduced risk of failure
- Provides a forum for discussion
- Probability of success
- Interoperability

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell to NFA, EPA</td>
<td>Provide success stories</td>
</tr>
<tr>
<td>Integrate program closely</td>
<td>Collaboration w/ labor/industry</td>
</tr>
</tbody>
</table>

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### Idea Refinement Worksheet

**Idea Name:** Examples From Other Areas that are Successful

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>We're telling &amp; selling a new concept</td>
<td>Sharing that we've developed change we are doing by trying similar strategies to other successful orgs or organizations, sharing these concepts to our workforce, and teaching these concepts in the new processes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower development time</td>
<td>Every student needs to be using the system</td>
</tr>
<tr>
<td>Time &amp; money saved on project failures</td>
<td>These concepts are expensive, but we're paying for it</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybersecurity &amp; data security are key features</td>
<td>No data breaches or loss of critical success factors</td>
</tr>
<tr>
<td>Quick implementation based on #1 &amp; #2</td>
<td>No cost, costs = time decay</td>
</tr>
</tbody>
</table>

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### Idea Refinement Worksheet

**Idea Name:** Mentorship / Coaching

<table>
<thead>
<tr>
<th>What is the greatest benefit from this idea? (e.g., ease of implementation, delight, innovation, home-changing, etc.)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>What is needed to ensure the benefits are realized/critical success factors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>transparent process, open feedback, clear goals, benchmarks</td>
</tr>
</tbody>
</table>

---

### Idea Refinement Worksheet

**Idea Name:** Engagement of End User

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop/Implement a new type of program focusing on engagement and feedback. Process for ongoing feedback, as much as possible, the direction for how the feedback and ideas coming from the users.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the greatest benefits from this idea? (e.g., ease of implementation, delight, innovation, home-changing, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More likely to adopt, longer users more receptive of change, new/innovative ideas, committee may get restructured, could help n.d. transition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is needed to ensure the benefits are realized/critical success factors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rather big, considerable feedback, meeting with key stakeholders (required), consistent, defined milestones, deliverables.</td>
</tr>
</tbody>
</table>
### Idea Refinement Worksheet

#### Idea Name: Utilizing MFAA Core Competencies for Career Development

<table>
<thead>
<tr>
<th>High Level Description (3-4 sentences or less)</th>
<th>Who will realize the greatest benefits from this idea?</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNINCORPORATED Core Competencies: Paths &amp; Tools, Curriculum, Opportunities, and Public</td>
<td>- Incumbent Commanders/CHO/USE</td>
</tr>
<tr>
<td>- Develop Uses</td>
<td>- MFAA Stakeholders</td>
</tr>
</tbody>
</table>

What are the greatest benefits from the idea being some of implementation, delight "customers", game-changing? Why?
- Faster Incident
- More efficient decisions
- Safer communities

What is needed to ensure the benefits are realized - critical success factors?
- UNICORPORATED Communication
- Learn from existing examples/background info
- Start early - be a pilot program
- Monitor/track success

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### Idea Refinement Worksheet

#### Idea Name: How Might KFC be integrated into MFAA Documents?

<table>
<thead>
<tr>
<th>High Level Description (3-4 sentences or less)</th>
<th>Who will realize the greatest benefits from the idea?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use as a Skill Maintenance/Currency Certification - appendix to existing document. Document should be in a form of a task book.</td>
<td>- end users</td>
</tr>
<tr>
<td>- professionals</td>
<td></td>
</tr>
<tr>
<td>- Citizen that are served</td>
<td>- Community</td>
</tr>
</tbody>
</table>

What are the greatest benefits from implementation, delight "customers", game-changing? Why?
- Provides a method to measure certified personnel - can demonstrate on-going proficiency.
- Enhances professional development
- Promotes professionalism
- Provides a structure for professional development

What is needed to ensure the benefits are realized - critical success factors?
- The 1000 adopt language to promote a culture of skill maintenance/currency in the field (cognitive)
- Buy-in from accrediting agencies (PMO/Board/IPC)
- Voluntary and non-voluntary as determined by AHS
### Idea Refinement Worksheet

**Idea Name:** Develop a KPC Modeling Guide

<table>
<thead>
<tr>
<th>What are the greatest benefits from this idea?</th>
<th>What’s needed to ensure the benefits are realized/critical success factors?</th>
</tr>
</thead>
<tbody>
<tr>
<td>* A defined way to determine and manage continuous improvement.</td>
<td>* Buy-in by stakeholders.</td>
</tr>
<tr>
<td>* Help guide continuous improvement and develop a high-performance organization.</td>
<td>* Forecast for attainable, ambitious, competitive.</td>
</tr>
</tbody>
</table>

### Idea Refinement Worksheet

**Idea Name:** Solicit Feedback from other Stakeholders (Industry, Agencies)

<table>
<thead>
<tr>
<th>Feedback from Stakeholder on previous incidences and/or similar certifications and/or credentials.</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Applying existing certifications towards the new KPC requirements.</td>
<td>- Engage more regulatory agencies (EPA/OSHA, -SPEC, HazMat/HAZWOPER, EPCRA, PSM/RMP)</td>
</tr>
<tr>
<td>- Cost/time savings</td>
<td>- Industry (exam)</td>
</tr>
<tr>
<td>- Career Development</td>
<td>- Insurance</td>
</tr>
</tbody>
</table>

- NFPA
- 472 Tech Community
- Individuals (less cumbersome)