



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS  
LANSING

ORLENE HAWKS  
DIRECTOR

**AGENDA**  
**MICHIGAN FIRE FIGHTERS TRAINING COUNCIL REGULAR MEETING**

Tuesday, February 9, 2021  
1:30 PM

Virtual Meeting via Zoom  
Join from PC, Mac, Linux, iOS or Android:

<https://us02web.zoom.us/j/85683005590?pwd=akt2OGwzNWZlZXg0am1oeEYvOGVpZz09>

Password: **R2FEx**

Phone: (866) 390-1828 (US Toll Free)

Conference code: 394127

- |      |  |                         |
|------|--|-------------------------|
| I.   | Call to Order, Moment of Silence, and Determination of Quorum                                    | Chairperson Tackett     |
| II.  | Approval of Agenda   | Chairperson Tackett     |
| III. | Approval of Minutes:   | Chairperson Tackett     |
|      | December 4, 2020 Regular Meeting   |                         |
|      | December 4, 2020 Special Meeting   |                         |
| IV.  | Communications   | Chairperson Tackett     |
| V.   | State Fire Marshal's Report  | Fire Marshal Sehlmeyer  |
| VI.  | Old Business   |                         |
|      | a. Updated Course Codes for McNeil's Driver's Training Program<br>(new version)                  | Councilperson Blomstrom |
| VII. | New Business   |                         |
|      | a. Proposed 2021 Meeting Schedule  | Fire Marshal Sehlmeyer  |
|      | b. Fire Expo 2022 from FY22 Funding  | Fire Marshal Sehlmeyer  |
|      | c. Fire Officer III Pilot  | Fire Marshal Sehlmeyer  |
|      | d. NIMS 100 and 200  | Fire Marshal Sehlmeyer  |
|      | e. Q Course Applications   | Chairperson Tackett     |
|      | 1. Insight Fire Training, Tactical Thermal Imaging (FMQ21-001)                                   | Jacob Latson            |
|      | 2. Peer Support: Bringing Your Team to the Next Level<br>(FMQ21-002)                             | Two the Rescue LLC      |
|      | 3. Loss of Control: Suicide, Post Traumatic Stress & High Risk<br>Behavior Education (FMQ21-003) | Two the Rescue LLC      |
|      | 4. Trench Rescue Awareness: The Dangers of Dirt (FMQ21-004)                                      | Eric Burghardt          |
|      | 5. MUSAR Awareness/Operations Level Rope Rescue<br>(FMQ21-005)                                   | Dave VanHolstyn         |
|      | 6. O2X Human Performance for Tactical Athletes (FMQ21-006)                                       | Jamal Mickles           |
|      | 7. Surface Ice Rescue Training (FMQ21-007)   | Nathan Furton           |

8. The Search for THEM (FMQ21-008)

Nathan Furton

VIII. Public Comment

IX. Council Comment

X. Adjournment

Chairperson Tackett



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**MINUTES**  
**MICHIGAN FIRE FIGHTERS TRAINING COUNCIL SPECIAL MEETING**  
**FY21 Returned County Allocation**  
Friday, December 4<sup>th</sup>, 2020  
9:00 AM

Virtual Meeting via Zoom  
Join from PC, Mac, Linux, iOS or Android:

<https://us02web.zoom.us/j/88142818550?pwd=YXl3UE9UU0ZzV3B5V0p4V0c1L0ExUT09>

Password: **vyv0K1**

Phone: (216) 706-7075

Or (866) 390-1828 (US Toll Free)

Conference code: 394127

**MEMBERS PRESENT:**

Brian Blomstrom, Vice Chair, Michigan Fire Service Instructors Association  
Alan Styles, Michigan Association of Fire Chiefs  
Lynnae White, Michigan Fire Inspectors Society  
Terrance Blackmer, Michigan State Firemen's Association  
Greg Janik, Michigan Municipal League  
Jacob Steichen, Nominee of the State Fire Marshal  
Aileen Pettinger, Michigan Professional Firefighters Union  
Kevin Sehlmeier, State Fire Marshal, Ex-officio Member

**MEMBERS ABSENT:**

Chad Tackett, Chairperson, Michigan Association of Fire Chiefs

**BUREAU OF FIRE SERVICES STAFF PRESENT:**

Andrea Keown, Department Technician, Fire Fighter Training Division/Recording Secretary  
Hollie Metts, Assistant to the State Fire Marshal (virtual meeting moderator)  
Dan Hammerberg, Region 1 Coordinator, Fire Fighter training Division

**OTHERS IN ATTENDANCE:**

Adam Brown, Detroit Metro/Willow Run Fire Department	Doug Bourgeois, Beaver Creek Fire Department
Andy Down, Long Lake Township Fire Department	Doug DeBest, Baroda Fire Department
Aric Massingill, Adrian Fire Department	Doug DenBleyker, Graafschap Fire Department
Brian Lorkowski, Harrison Township Fire Department	Doug Pratt, Frederic Township Fire Department
Carrie Edwards-Clemons, Flint Fire Department	Greg Flynn, West Bloomfield Fire Department
Christopher Mantels, Saugatuck Township Fire Department	Greg Mowbray, Brighton Area Fire Authority
Corey Miller, Berkley Department of Public Safety	Jack White, Shelby-Benona Fire Department
Dan Deyo, Morely Fire Department	Jason DeNeau, Southfield Fire Department
Dan Vandyke, Rockford Fire Department	Jesse Marcotte, Northville Township Fire Department
David Mc Inally, Van Buren Dept. Of Public Safety	Jim Plieth, Detroit Fire Department
David Pelton, Walker Fire Department	Jim Stevenson, Warren Fire Department
	John Martin, Novi Fire Department

John McKay, Owosso Department of Public Safety  
Josh Mosher, Midland Fire Department  
Kevin Powers, Madison heights Fire Department  
Kurt Corradi, Bay City Fire Department  
Mark Cleveland, Egelston Twp. Fire Department  
Mark Nicolai, Muskegon Fire Department  
Mark Nicholai, Ann Arbor Township Fire Department  
Matt Fruchey, Beaverton Fire Department  
Matthew Hagerty, Onoto Fire & Rescue  
Mike Keefe, Allendale Fire Department  
Robert Bryant, West Bloomfield Fire Department

Robert Ginther, Beverly Hills Public Safety  
Robert Smith, Dexter Area Fire Department  
Ryan Tibbets, Kalamazoo Public Safety Department  
Stacy French, Portage Fire Department  
Steve McKellar, Michigan Association of Fire Chiefs  
Steve Rynbrandt, Clio Fire Department  
Steve Wart, Athens Township Fire Department  
Teresa Robinson, Lansing Fire Department  
Tim Seal, North Oakland County Fire Authority

## **I. CALL TO ORDER AND DETERMINATION OF QUORUM:**

**Vice Chair Blomstrom** called the special meeting session to order at 9:04 A.M. Roll call was taken

Chairperson Tackett – absent  
Councilperson Blomstrom – present  
Councilperson Styles – present  
Councilperson White – present  
Councilperson Blackmer – absent  
Councilperson Janik – present  
Councilperson Steichen – present  
Councilperson Pettinger – present  
Fire Marshal Sehlmeier – present

A quorum was determined present.

## **II. REVIEW AND APPROVAL OF AGENDA:**

### **20-12-01**

A **MOTION** was made by **Councilperson Janik** and seconded by **Councilperson Pettinger** to approve the December 4<sup>th</sup>, 2020 special meeting agenda, as presented.

A roll call vote was taken.

Chairperson Tackett – absent  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White – absent  
Councilperson Blackmer – absent  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier – yes

Six votes yes. **MOTION CARRIED.**

## **III. COMMUNICATIONS:**

**Councilperson Blomstrom:** spoke with Jim Plieth from Detroit Fire and he brought up that the mental health discussion that was had at the last meeting was good and is looking forward to hopefully continuing the discussion today as part of how to spend unencumbered funds.

**Councilperson Styles:** Also had a conversation with Jim (Plieth) and look forward to discussing that with everyone today.

**Councilperson Blackmer:** Had a couple of communications regarding the discussion that was had at last month's meeting regarding the funding for the firefighter academies, I had a couple of communications that were in support of that in raising the funding.

**Councilperson Janik:** received a couple communications regarding the county allocations and

funding in general. A lot of communications about live fire training that I am looking forward to sharing that with council.

**Councilperson Steichen:** Contacted the RTC's, in particular the northern ones and will include that in council conversation.

**Councilperson Pettinger:** Had a bunch of communication as well, State Representative Kent reached out in regard to HazMat class accommodations and questions on that. Had a meeting with the fire marshal in Saint Clair Shores in regard to officer questions. I also talked with Jim Plieth about Detroit, they have a lot of concerns about behavioral health and are really interested in pushing that forward.

**Fire Marshal Sehmeyer:** Had a conversation almost daily with at least somebody regarding the topics we will be discussing today.

#### **IV. NEW BUSINESS:**

**FY21 Returned County Allocation:** Fire Marshal Sehmeyer started by talking about funds that possibly could come back after December 31<sup>st</sup>. Council discussed live fire training and mental health initiatives as a means to utilize the unencumbered funds and decided to move in the direction of looking at mental health first and live fire training second. Councilperson Janik commented that since there are many departments not up to speed on mental and behavioral health issues, that council make it as easy as possible to obtain training and courses and suggested the possibility of having someone promote the importance of firefighters mental and behavioral health. Councilperson Pettinger suggested possibly using MI Prevention as an avenue to market and promote this initiative. Councilperson Styles feels the biggest difficulty will be that there are so many different products out there and each department varies in their presentation preference. Councilperson Blomstrom recommended that council should approve the courses and vendors, utilizing the Q Course list and if there is a course not on the Q Course list, have that person/vendor fill out the application to get them on the list so funds can be applied to that course. This will allow departments to choose the best training/course that fits their needs.

Council discussed distributing the funds by dividing the counties into regions then went through and broke the state up into 27 counties (map attached below\*). Each of the 27 regions will have to establish a fiduciary that would accept that money on behalf of said region. The fiduciary will have to be one of the county training chairpersons of that area since they are already established in the bureau's system for accepting payments. Council detailed how as the funds are returned, it would be distributed in \$27,000.00 increments, meaning each region would receive \$1,000.00 every time the bureau receives \$27,000.00 in unencumbered funds. Councilperson Styles asked if there is a rough estimate of what might be returned. Fire marshal stated on average, in the last 2-3 years, council has awarded at least \$100,000 throughout the year of unencumbered funds. Councilperson Blomstrom asked if numbers are down for SMOKE entries in regard to classes this year versus years of no Covid. Fire marshal stated that they are not. Consistently, BFS has received \$100,000 back every year, so he does not think that trend is going to change.

#### **V. PUBLIC COMMENT:**

**Jim Plieth, Detroit Fire Department:** Appreciates all of the dialogue and appreciates everyone taking his call. Over the last two weeks we have suffered two, but one for sure suicide in the city of Detroit. Something that a lot of people aren't looking at, at least in our department, is on the back end of Covid, we're going to have a huge problem in the city of Detroit that nobody is looking at. We have guys that, five years ago started doing medical runs, they had 25-30 years on the job. On the back side of this they are going to have some issues of seeing things that they haven't seen in the first 20 years of their career that they'll have to deal with. It's not just our young guys coming on to the job. At some point during Fire Fighter I & II, should we be introducing some type of mental health and wellness training and learn how to talk to your peers and your fire houses as their going through their academies. I have received tons of outreach nationally from people and I'll be sharing things with people as I get things in. I will send it out to you guys so you can share it with your departments. This is a really outstanding conversation that really needs to keep going.

**Matthew Hagerty, Onota Fire & Rescue:** Asked via chat function, "Could you use the region training coordinator as the fiduciary for the reallocation?" Fire Marshal explained that the regional

training coordinator is an independent contractor of the Bureau of Fire Services, so we need a county or agency to be the fiduciary.

**Tim Seal, North Oakland County Fire Authority:** Commented via chat function, Mental Health and Wellness is covered in the JB 4th edition Chapter 2 and within NFPA 1500. I cover it at length with my academies as I have my CISM Certificate.

**Mike Keefe, Allendale Fire Department:** Just a question and clarification, so through my understanding there will be no other grant funding money available other than wellness classes correct? So if we want to do another Advanced Fire Dynamics class here, there will not be grant money for those type of things this year? Councilperson Blomstrom remarked that based on the motions coming down at the next meeting, that is correct. The money that comes in will be divided up into \$1,000 groups and the focus will be on mental health and wellness.

**Carrie Edwards-Clemons, Flint Fire Department:** via chat function, "Thank you for all that the committee is doing to address this issue. My audio is not operable."

## **VI. COUNCIL COMMENT:**

**Councilperson Blomstrom:** I just want to echo what everyone else has been saying. I think that council as a group did great work today, coming together to come up with a plan to discuss this. Not only is this something we need to look at as a council and stand behind that we need to get this out there to individuals. I think also as a council that it shows that we're doing due diligence and looking at the issues in the fire service. I'll go back to saying in the past few years, where did we spend the extra money coming in, what did we try to do, we've done a lot of things with classes, props, regional grants. We've done something different every single year, but we looked at what is a priority that needs to be done in the fire service. This year, we're going in a different direction, something that is very important to the fire service, looking at the health and wellness of our people. So as we show the state of Michigan how we go about looking at priorities and things, this is a step in the right direction saying it's not just about going to class or buying equipment, now we're looking at reinvesting in the personnel who provide these services throughout the state and looking at their health and wellbeing. It's about the people that we all care about as brothers and sisters in the fire service and retention and recruitment and health and wellness. I think this is a great way we have gone this fiscal year and I'm looking forward to seeing this money get distributed out. I'm looking forward to seeing all the classes that can be offered.

**Councilperson Styles:** Not really much to say at this point with everyone's wonderful comments. The biggest thing that I got out of this is that over the last few years that both the union and Yellow Rose Campaign through the chiefs, and individuals going out and trying to promote mental wellness has always kind of been a fractured thing. To have the governing board of Michigan training standing behind this should speak volumes, even to other states to say that we as a combined front to try to combat this epidemic. I applaud everyone for this, Aileen, thank you for bringing this up as the initial idea. This is very near and dear to my heart, I couldn't be happier that we're doing this. I applaud having these conversations.

**Councilperson Blackmer:** Just to piggy back what Aileen said, if PTSD or anything haven't your fire department yet because of Covid, they will eventually. I have firefighters coming into my office talking to me openly about things that they never probably would have a year ago. Just between the different stresses and things, that that adds on to the job. I think we're on the right road, there is definitely value in what we are trying to accomplish. I like the direction, I like that fact that we grouped it off regionally and let them assess their own needs and divide that money equally. SO I think it was a good morning. I think we got a lot more accomplished than we thought we would.

**Councilperson Janik:** Applauds the council for the direction they are taking and the focus. This is an investment and in a way it doesn't even seem to be adequate but creating the awareness and the money we're putting into this, is the right thing to do. I'm grateful to council for focusing on this behavior and mental health. Thank you.

**Councilperson Steichen:** Coming into this meeting, I didn't know how it was going to shake out, but I'm really happy with what we came up with. I think it's a very fair and equitable way of handling the money as it comes in. What we're doing in north west Michigan is pretty unique and it might inspire others. If you go to [www.NMlpeernetwork.com](http://www.NMlpeernetwork.com), we also had to open up a private Facebook

page that has 300 members from all different fire, EMS, dispatch, all the different backgrounds. We're encouraging open dialogue and people to really break down the stigma. I think what we're doing here today and going forward is going to really be a huge difference for future generations.

**Councilperson Pettinger:** Appreciates that everyone notices the importance of this topic. We have got to have healthy firefighters especially with Covid. I really appreciate everyone's support in this important issue.

VII. **ADJOURNMENT:**

**20-12-02**

A **MOTION** was made by **Councilperson Janik** and seconded by **Councilperson Steichen** to adjourn the special meeting/work session.

A roll call vote was taken.

Chairperson Tackett – absent  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –absent  
Councilperson Blackmer – yes  
Councilperson Janik– yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier – absent

Six votes yes. **MOTION CARRIED.** The meeting adjourned at 11:02 AM.

**APPROVED:**

\_\_\_\_\_  
Chairperson Tackett

\_\_\_\_\_  
Councilmember

**\*(Map will be added on pdf)**

DRAFT





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STATE OF MICHIGAN  
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS  
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## MINUTES MICHIGAN FIRE FIGHTERS TRAINING COUNCIL REGULAR MEETING

Friday, December 4, 2020  
1:00 PM

Virtual Meeting via Zoom

Join from PC, Mac, Linux, iOS or Android:

<https://us02web.zoom.us/j/88142818550?pwd=YXl3UE9UU0ZzV3B5V0p4V0c1L0ExUT09>

Password: **vyv0K1**

Phone: (866) 390-1828 (US Toll Free)

Conference Code: 394127

### **MEMBERS PRESENT:**

Chad Tackett, Chairperson, Michigan Association of Fire Chiefs  
Brian Blomstrom, Vice Chair, Michigan Fire Service Instructors Association  
Alan Styles, Michigan Association of Fire Chiefs  
Lynnae White, Michigan Fire Inspectors Society  
Terrance Blackmer, Michigan State Firemen's Association  
Greg Janik, Michigan Municipal League  
Jacob Steichen, Nominee of the State Fire Marshal  
Aileen Pettinger, Michigan Professional Firefighters Union  
Kevin Sehlmeier, State Fire Marshal, Ex-officio Member

### **MEMBERS ABSENT:**

None

### **BUREAU OF FIRE SERVICES STAFF PRESENT:**

Dan Hammerberg, Region 1 Coordinator, Fire Fighter Training Division  
Andrea Keown, Department Technician, Fire Fighter Training Division/Recording Secretary  
Hollie Metts, Assistant to the State Fire Marshal (virtual meeting moderator)

### **OTHERS IN ATTENDANCE:**

Alfie Green, Detroit Fire Department  
Andy Down, Long Lake Twp. Fire Department  
Barry Narrin, Otter Lake Fire & Rescue  
Bill Parker, Blair Twp./Northwest RTC  
Bill Priese, Meridian Twp. Fire Department  
Brandon Cory, Marquette City Fire Department  
Brian Marquardt, Eastpoint Fire Department  
Brian Sipe, Grand Haven Twp. Fire Department  
Bryan Kukla, Frankenlust Twp. Fire Department  
Cameron Pichan, Detroit Fire Department  
Charlie Noonan, Troy Fire Department  
Cindy Conrad, South Lyon Fire Department  
Colin Morrow, Jackson Fire Department  
Corey Miller, Berkley Dept. Of Public Safety  
Dan Besson, Leland Twp. Fire Department

David Feichtner, Springfield Twp. Fire Department  
David Pelton, Walker Fire Department  
David Platz, Holly Fire Department  
Derek Smith, Long Lake Rescue/Almira Twp. Fire & EMS  
Don Drent, Northeast Ingham Emergency Services Authority  
Doug Borgeois, Beaver Creek Fire Department  
Jack White, Shelby-Benona Fire Department  
Jeffrey Hughes, Crockery Twp. Fire Department  
Jeff Johnson, Novi Fire Department  
Jerry Becker, Harrison Community Fire Department  
Jesse Marcotte, Northville Twp. Fire Department  
Jim Stevenson, Warren Fire Department  
Jon Roberts, Berkley Department of Public Service

Jon Stone, Stanton Twp. Fire Department  
John Martin, Novi Fire Department  
John Pender, Orion Twp. Fire Department  
John VanCoillie, Albert Twp./Lewiston Fire Department  
Josh Mosher, Midland Fire Department  
Justen Diaz, Memphis Fire Department  
Kurt Corradi, Bay City Fire Department  
Kurt Grover, St. Clair Shore Fire Department  
Liam Carroll, Schoolcraft College RTC  
Mark Cleveland, Egelston Twp. Fire Department  
Mark Fankhauser, Grand Rapids Fire Department  
Matt Majestic, Oakland Community College  
Matt Samhat, Northville Fire Department  
Michael Yanz, NIESA  
Mike Gregorich, Marquette Twp. Fire Department  
Mike Keefe, Allendale Fire Department  
Mike Koehler, Troy Fire Department

Nick Miller, Hamburg Twp. Fire Department  
Paul Hapke, Fennville Area Fire Department  
Paul Vosburg, Kalamazoo Airport Fire Department  
Rob Ginther, Beverly Hills Dept. Of Public Safety  
Robert Smith, Dexter Area Fire Department  
Scott Harkes, Allendale Twp. Fire Department  
Sean Canto, Rochester Hills Fire Department  
Shawn Allen, Sterling Heights Fire Department  
Steve Dalton, Clinton Twp. Fire Department  
Steve Rynbrandt, Clio Area Fire Department  
Steven McKellar, Plainfield Twp. Fire Department  
Terrance Chesney, Michigan Professional Fire Fighters Union  
Thea Dornbush, Muskegon Twp. Fire Department  
Timothy Seal, North Oakland County Fire Authority  
William Engelter, Lansing Fire Department

## **I. CALL TO ORDER AND DETERMINATION OF QUORUM:**

Before **Chairperson Tackett** called the regular meeting to order, he announced a roll call vote will be done for any motion put forth to council during this meeting and read a virtual meeting introduction advising of the procedures for the meeting, public comment, and the steps that would be taken if the meeting were disconnected.

**Chairperson Tackett** called the meeting to order at 1:01 PM, a roll call was taken.

Chairperson Tackett – present  
Councilperson Blomstrom – absent  
Councilperson Styles – present  
Councilperson White – absent (present at 1:05 PM)  
Councilperson Blackmer – absent (present at 1:20 PM)  
Councilperson Janik – present  
Councilperson Steichen – present  
Councilperson Pettinger – present  
Fire Marshal Sehlmeier – present

A quorum was determined present.

## **II. REVIEW AND APPROVAL OF AGENDA:**

### **20-12-03**

A **MOTION** was made by **Councilperson Steichen** and seconded by **Councilperson Janik** to approve the December 4, 2020 regular meeting agenda, as presented.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White – absent  
Councilperson Blackmer – absent  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

Seven votes yes. **MOTION CARRIED.**

**20-12-04**

A **MOTION** was made by **Councilperson Steichen** and seconded by **Councilperson Janik** to amend the agenda to reflect a 1:00 PM start time.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – absent  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

Eight votes yes. **MOTION CARRIED.**

**III. REVIEW AND APPROVAL OF MINUTES:**

**20-12-05**

A **MOTION** was made by **Councilperson Blomstrom** and seconded by **Councilperson Steichen** to approve the following minutes with **Councilperson White** and **Councilperson Pettinger's** grammatical edits:

July 28, 2020 Special Meeting  
August 11, 2020 Regular Meeting  
August 11, 2020 Special Meeting

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – absent  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

Eight votes yes. **MOTION CARRIED.**

**IV. COMMUNICATIONS:**

**Fire Marshal Sehlmeier:** has received several phone calls and had several conversations about mental and behavioral health initiatives in the state. These phones calls stem from the Wednesday Wrap-Up's as well as the recent suicide of a 25-year veteran of the Detroit Fire Department. There have also been two line of duty deaths in the last 15 days, so there will be a lot of conversation going forth.

**Councilperson Janik:** received correspondence from the Michigan Association of Fire Chiefs (MAFC).

**Councilperson Pettinger:** received inquiries about accommodations for people with learning disabilities during HazMat tests. Spoke with Dan Hammerberg and he answered some questions for State Representative Paquette's office. The fire marshal and I met with Saint Clair Shores via Zoom in regard to officer classes and also I have communicated with several people about behavioral

health as well as the recent suicide in Detroit.

**Councilperson Blomstrom:** over the last six weeks, I have had conversations regarding mental health as well. There was some discussion among the instructor board with some questions as to Instructor I as well as the payment to the training coordinators while teaching that course. I spoke with fire marshal about it and will be drafting a response to our organization based on that conversation.

**Chairperson Tackett:** received a letter from MAFC as well, will forward it out to the group concluding this meeting. Also, I received a couple inquiries of the agendas not being online. I forwarded that request to Hollie and Andrea to see if we can get the agendas online earlier than what we have been.

**Councilperson Steichen:** reached out to several of the RTC coordinators regarding the discussion from last meeting that revolved around live fire to vet their needs and how they see things going in the future. I believe that live fire training, especially in the northern regions, is a priority and we are going to work towards bettering the access to live fire training.

**Councilperson White:** received a call from President Kyle Svoboda from Michigan Fire Inspector Society (MFIS), he assured me that I will be receiving better communication from the MFIS going forward.

## **V. STATE FIRE MARSHAL'S REPORT:**

Fire marshal started out by welcoming the Jackson County High School Fire Academy. He then acknowledged the two line of duty deaths that happened in November. On November 17, 2020, Captain Joe Gallow of Blissfield Township Fire Department and on November 19, 2020, Michael Buitendorp of the Grant Township Fire Department.

- a) **Region Coordinator Position:** The position is being posted as of December 4, 2020 and closes on December 10, 2020 at 5:00 PM. To view the job posting and apply go to [www.michigan.gov/mdcs](http://www.michigan.gov/mdcs) (MDCS = Michigan Dept. of Civil Service) and click on "State Jobs".
- b) **Revised Course Summary (Handouts):** Fire marshal provided council with handouts for FY21 to give an idea of how courses are going so far in the first quarter fiscal year.
- c) **Deadline to Encumber FY21 County Funding:** Fire marshal reminded the county training chairs that the deadline to encumber all county funds is December 31, 2020. Any money that has not been encumbered at the county level will be returned to the training council.
- d) **Draft FFTC Rules Update:** We are continuing to move through the rules process at LARA. The Regulatory Impact Statement and Cost Benefit Analysis was just completed and is waiting on any clarifications needed from MOAHR. If approved, MOAHR will notify JCAR and a Notice of Public Hearing is prepared and sent to MOAHR, who again will notify JCAR. Everyone will get notice of the public hearing, either by newspaper or by GovDelivery. For more information on the Rulemaking Process click [here](#).
- e) **Legislative Updates:**
  - 1) **"Lame" lame duck:** Anything legislative wise must be taken care of or taken up and voted on by December 31, 2020. If there is no movement on legislation then all the Bills introduced since January 1, 2019 go away and we start over on January 1, 2021 during a new two (2) year legislative session. Some of the things to consider for the next legislative session is that everyone is up for re-election two years from January.
  - 2) Bills to watch that may come up during lame duck:
    - i. [HB 4792](#) – Unattended Fueling: All of the fire groups, as well as the Bureau of Fire Services (BFS) have come out against that Bill. We need to ensure the safety of the fueling public as well as the community at large.

- ii. [HB 6148](#) – O'Malley Bill to amend PA 390 of 1976, the Emergency Management Act: This would take emergency management out of the Michigan State Police and move it into its own agency.
  - iii. [HB 4063](#) - Cancer Presumption Bill: Was approved by the Insurance committee to include paid on call and volunteer firefighters and moved to the Ways and Means Committee. MPFU is trying to get it on the agenda to include breast, ovarian, and cervical cancer as well as retirees from when they retire from the fire department to when they are eligible for Medicare.
- f) **eNFIRS Update:** Still some issues with third-part Software providers., Please remember on third party software NFIRS data transfers, just because the email subject line says “Data Transfer” does not mean that your data uploaded to the NFIRS site. Please go to the last page of the whole email to see how much data was uploaded. Many of the third-party software that a lot of the departments are using around the state have work that needs to be done to align with the rules of what NFIRS will allow to allow your fire reports go into the system. Third-party users can now upload data, just not massive files and not all at one time. If you are an eNFIRS user or you use the free federal NFIRS software, that is up and running.
- 1) **Wednesday Wrap-Up:** The next Wrap-Up is on Wednesday, December 16, 2020 at 4:00 PM. They will continue after the holidays and will host monthly Zoom calls at 7:00pm.
- g) **It's Friday with MI Prevention:** The second edition will be held on Friday, December 11, 2020 at 2:00 PM via Zoom. The topic this time will be carbon monoxide.
- h) **2020 Fatal Fires:** As of December 4, 2020, there have been 112 fire related deaths in the state.
- i) **Upcoming Training:**
- 1) Instructor Orientations will be held on December 22, 2020 and January 1, 2021 from 6:00pm-10:00 PM.
  - 2) Instructor I Update will be held on January 5, 2021 from 6:00-10:00 PM. In order to attend the update you MUST be Instructor II Certified and have taken the Michigan Fire Instructor I class.
  - 3) Fire Officer I & Fire Officer II Train-the-Trainers have three sessions in the new year. January 21, 2021 from 12:00-5:00 PM, February 9, 2021 from 6:00-11:00 PM, and March 11, 2021 from 12:00-5:00PM. There will be more sessions scheduled throughout the year. In order to attend the Train-the-Trainer you MUST be certified in the following:
    - Fire Officer I (E01A or E01B)
    - Fire Officer II (E02A or E02B)
 or
    - Company Officer I and II series (O21A)**and** be certified as a
    - Certified Fire Instructor I (O54A)

Fire Marshal Sehlmeier gave a summary of the accomplishments the BFS, with the help of the MFFTC was able to complete this year.

- BFS implemented the brand new Fire Instructor I curriculum.
- Provided refresher training to 70 people for the HO7C Instructor I course update so those instructors may continue to teach Fire Instructor I.
- Updated the Fire Instructor I exam to the latest NFPA 1041 Standard.
- We now have the capability in the State of Michigan to do Fire Fighter I & II courses virtually.
- We ran a pilot course and released the new Fire Officer I and Fire Officer II curriculum.
- We are currently developing the Fire Officer III with a target date of having the Train-the-Trainers up and running by February 1, 2021.

## VIII. NEW BUSINESS:

- a) **FY21 Returned County Allocations:** Fire Marshal Sehlmeier explained in Public Act 291, that any money returned after January 1<sup>st</sup>, that council may reallocated those funds. At the special work group meeting, it was determined that the council would like to do some things with mental health and worked to break the state into 27 regions. Council spoke about how as the funds are returned, it would be distributed in \$27,000.00 increments, meaning each region would receive \$1,000.00 every time the bureau receives \$27,000.00 in unencumbered funds. Each of the 27 regions will have to establish a fiduciary that would accept that money on behalf of said region. It will also have to be one of the county training chairpersons of that area because they are already established in the bureau's system for accepting payments. There are currently 7 courses available, however any new mental and behavioral health course will have to be approved by council.

Fire marshal further clarified that **Motion 20-06-09** from the June 9, 2020 Regular Meeting giving the Joint Fire Council the first \$80,000 would come out of the unencumbered funds first, then any returned funds after that will go towards any mental and behavioral health initiatives.

### **20-12-06**

A **MOTION** was made by **Councilperson Janik** and seconded by **Councilperson Blackmer** to approve returned fireworks funds to be distributed to a designated county training chairperson in the amount of \$1,000, for a total of \$27,000 to the council designated 27 districts for mental and behavioral health courses.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – abstain  
Councilperson White –yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

Eight votes yes, one abstention. **MOTION CARRIED.**

- b) **Adoption of the Health and Safety Program Manager Curriculum:** The Health and Safety Program Manager Course (F0722) is scheduled in Muskegon County in January 2021. The class is currently full with 25 people. Since the previous Health and Safety Officer course has been eliminated, councilperson Blomstrom is requesting this course be added to the course catalog and made available to Instructor I's who successfully complete the course. Also, by adding it into SMOKE prior to the NFA arriving, the BFS will have a record of who took the initial offering and could instruct it in the future.

### **20-12-07**

A **MOTION** was made by **Councilperson Blomstrom** and seconded by **Councilperson Pettinger** that council adopt the new Health and Safety Program Manager Curriculum (F-0722).

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes

Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

**MOTION PASSED UNANIMOUSLY.**

- c) **Sunset of the Health and Safety Officer Program:** Councilperson Blomstrom communicated that this course is no longer supported by the NFA and has been eliminated and replaced by the Health and Safety Program Manager course.
- d) **Updated Course Codes for McNeil’s Driver’s Training Program (new version):** Councilperson Blomstrom conveyed that this can be moved to Old Business as the updated Driver’s Training program was set to be released around the Instructor’s Conference however, that did not happen. When the new program is finally released, Councilperson Blomstrom will be requesting an updated course code for the overall class and a course code for the newest Train-the-Trainer. The course has not been finalized yet, but it will hopefully be ready to go in February 2021.
- e) **Updating ICS 300/400 Courses in the Course Catalog (I15A and I16A):** The newest manuals for ICS 300 and ICS 400 were released in April 2019. During that time, FEMA offered online updates and exams to “recertify” instructors to the new curriculum. In December 2019, FEMA disbanded their recertification program, turning it over to the Michigan State Police (MSP). During this calendar year, the MSP has been working with individuals to recertify their ICS 300 and ICS 400 credentials. A joint memo from the BFS and the MSP was posted over GovDelivery about the updates and need to recertify as well. After the instructors are recertified, they are given the newest edition of the instructional materials. At this point, of the 32 instructors for ICS 300 and ICS 400, ten instructors have recertified and are eligible to instruct the course. Councilperson Blomstrom requested the old ICS 300 and 400 course codes be deactivated and have new course codes for the classes correlating to the April 2019 newest curriculum. The ten instructors from the previous BFS instructor list who have recertified through the MSP or FEMA would be placed on the newest instructor list. If additional original instructors decide to recertify, they could also be added to the list in the future.

**20-12-08**

A **MOTION** was made by **Councilperson Blomstrom** and seconded by **Councilperson Janik** to sunset I15A and I16A and establish I15B and I16B using the recent curriculum, ICS 300 and 400 from FEMA.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

**MOTION PASSED UNANIMOUSLY.**

- f) **Increasing funding for Firefighter I & II Programs:** Councilperson Blomstrom explained that during public comment at the last MFFTC meeting, it was mentioned about the need to increase

funding for Firefighter I and II programs in order to assist with compensating additional instructors to meet a 5 to1 student-to-instructor ratio. In December 2019, **Motion 19-12-05** was made to have a three-tiered system of class compensation, based on the number of students failed, however, the same problem still exists. The main problem is that \$16,225 does not adequately compensate academies for payroll, supplies, and needed items for class. The funding in SMOKE needs to be increased above \$16,225 so counties have the ability to fund academies above their \$17,500 utilizing other county fireworks funding. Currently, once the \$16,225 limit is reached, departments are forced to pay cash to cover the rest of the balance of the course, this can be difficult for departments with very minimal training budgets.

#### **20-12-09**

A **MOTION** was made by **Councilperson Blomstrom** and seconded by **Councilperson Pettinger** for a five (5) tier system for FF I&II/HazMat Operations. 1-10 students is \$12,000, 11-15 students is \$16,225, 16-20 students is \$20,000, 21-25 students is \$24,000, and 26-30 students is \$28,000 for money that can be placed into SMOKE, with the student number coming from the 4th lecture date. For only FY21, any class with 15 or less students stays at \$16,225.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehlmeier - yes

**MOTION PASSED UNANIMOUSLY.**

#### **g) Q Course Applications:**

**1) SOFA Basic Ground Ladder Techniques (FMQ20-018)**

Instructor: Robert Ginther / Phone: (248) 540-3417  
Email: [rginther@beverlyhillspolice.com](mailto:rginther@beverlyhillspolice.com)

**2) SOFA Basic Fire Ground Communications (FMQ20-044)**

Instructor: Robert Ginther / Phone: (248) 540-3417  
Email: [rginther@beverlyhillspolice.com](mailto:rginther@beverlyhillspolice.com)

**3) SOFA Advanced Fire Ground Communications (FMQ20-045)**

Instructor: Robert Ginther / Phone: (248) 540-3417  
Email: [rginther@beverlyhillspolice.com](mailto:rginther@beverlyhillspolice.com)

#### **20-12-10**

A **MOTION** was made by **Councilperson Styles** and supported by **Councilperson Steichen** to approve **FMQ20-018, FMQ20-044, and FMQ20-045** submitted by Robert Ginther.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes



Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehmeyer - yes

**MOTION PASSED UNANIMOUSLY.**

- h) 2021 Meeting Dates:** At a minimum council needs to approve a February date to meet to set up our meeting dates for 2021.

**20-12-11**

A **MOTION** was made by **Councilperson White** and supported by **Councilperson Pettinger** to meet virtually on Tuesday, February 9th, 2021 at 1:30 PM where we will vote on 2021 meeting dates.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White –yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehmeyer - yes

**MOTION PASSED UNANIMOUSLY.**

**IX. PUBLIC COMMENT:**

**Rob Ginther, Beverly Hills Public Safety:** Fully supports and believe it is a good idea to tier the fire academies based on participation, however would like to bring to councils attention is the timeline of encumbering money versus what you may end up resulting with in your academies, which is to say, you have an academy in April, you're pretty sure you're going to have the maximum amount, however you only end up with 15, that money would automatically go back into the state training fund for redistribution. However, there may be unfunded courses within that county that didn't make the cut. Council may want to consider, that if academies encumber money but use less based upon the tiered pricing, that that money is first given back to that county for reallocation for courses that may not have been funded before it is taken from the county.

**Colin Morrow, Jackson Fire Department:** Thanked everyone for hosting Jackson County academy.

**Steven McKellar, Plainfield Twp. Fire Department:** Would like to commend the board. The fire academies, depending on your students, are ran by the more students you have the more instructors you have and I'm glad that's being recognized.

**Tim Seal, North Oakland Fire:** Appreciates councils due dilligence and hard work. Thank you for addressing the academy issue, it is a move int he right direction to provide the quality instructing int he academy that council is looking for. Thank you very much.

**X. COUNCIL COMMENT:**

**Councilperson Tackett:** I'd like to echo each and every one of you. I think it's been an outstanding year. We've made lots of progress, most of all I'd like to thank our friends and family who come to these meetings every single day. Even if they don't come to the meetings, they're reaching out to us about their concerns and the changes they want to see. That's really where we get our vision from,

where we get our direction from. Even though we are part of organizations I think obviously the fire services is one big family, and we are all together on this. Brian, good work on the tiered system and bringing it back, I don't think the concept before was out there, it was just the motion itself. I think we all know they are underfunded. It's a good start, we can always make adjustments if necessary. I wish each one of you and your families a safe, merry Christmas.

**Councilperson Blomstrom:** Merry Christmas to everyone. Thank you for being patient with me and going through the 300, 400, as well as looking at the tiered system. I think it was kind of a blessing that last year it was voted down because I think that the feedback I've received since that time, I've listened to council members after that meeting, some of the concerns that were weaved into this. I look forward to moving forward with the better "product". I appreciate all the council people that spoke to me about this in the last year especially after that vote and also the feedback I received in the field. Again, Merry Christmas everyone and Happy Holidays.

**Councilperson Styles:** A couple things, a long day but thank you for the due diligence of everybody, I know some of the people who weren't there this morning, we did go long and hard about it, and I'm very passionate about mental wellness and I think that this is a step in the right direction, obviously next year we'll do something different, but I think this is key right now. I share sentiments with Aileen about the firefighter who lost his life to cancer but again, the 109 that have taken their lives, no all necessarily from Michigan but the 2 in Detroit here recently really hit home again that we have to fix this, and I know some people don't like this and I will say this as a Chief Officer, if your administration doesn't believe in this, have then call me. I will explain to them very fruitfully of why this is important and believe me we will be successful. For the rest of my council members, thank you for really putting the due diligence into this. To Brian for the right thing to do, it just took some time, like everything, you can't build it in a day but you can get it there. I wish everybody a very happy holiday season and wish for everyone to have a Happy New Year. Please be safe with this Covid, it's still getting us but we'll get there. Keep your head up and your hands clean and we'll see ya when we see ya.

**Councilperson Blackmer:** It was a good day today. It was a long day, but we got a lot accomplished. I also voted "no" a year ago on the similar proposal, but I think it is important to look to the things we've tackled as a council, we seem to find a way to get a compromise and do what we think is best for the fire service in our state. I think that it's good that that happens, I'm always proud when we can come to a compromise and find some middle ground, even on some things that we started a mile apart on, by the time we are finished with the discussion, we are able to bring things together. Just to reiterate, I think the motion for the mental health and well being is very important and the groups that we put together will take that and use those funds to continue to improve the mental well-being of our firefighters. With that, everybody have a great Christmas and well see you after the new year.

**Councilperson Janik:** Merry Christmas and Happy Holidays to everyone. I feel the council made some significant progress today, strong work. In particular to Aileen for brining behavior and mental health to the forefront to the focus of the council, my hat is tipped to you. Brian, you're like locomotive, you just keep going and I admire that about you. I think both of you are most notable today and that's all I have.

**Councilperson Steichen:** Thanks everyone for their attendance and their hard work. I commend Brian on his motion today, your work doesn't go unnoticed. I also want to acknowledge feedback on the original motion that Brian had submitted to the council that I voted "no" on. After reaching out and getting feedback necessary to make the right vote, I was comfortable today with agreeing with Brian's motion. Everyone's feedback in important, all of our contact information is available on the bureaus website and I look forward to hearing from everyone via phone or email.

**Councilperson Pettinger:** I want to start out with listening to the fire marshals report and the line of duty deaths we've had, I know a fellow fire fighter who recently passed from cancer. I was going to

suggest to see if we could start each council meeting with a moment of silence for all fire fighters who have died since the previous council meeting. I don't know if we need a motion for that, I just thought it would be appropriate. I think we used to but we kind of got a way from it. If we could add that to the agenda, that would be great. Talking about cancer, House Bill 4063, we are trying to rename it in memory of Chris Slezak who died November 25<sup>th</sup> after a 12 year battle with leukemia, I just would like to say to all the Sterling Heights firefighters that you're in our hearts and we're just thinking of you guys and we're hoping to get this thing passed. I will be sending in the chat, Representative Iden's phone number as well, I saw his email in there a couple times. I'd like to say thanks for patience and due diligence with the fire academy motion we did, we did a great job and a lot of research and I appreciate it. Merry Christmas and a Happy New Year to Everybody.

**Fire Marshal Sehmeyer:** Great work by the council, it's pretty amazing, when you look back on the year and see all that you've accomplished in this very weird year. Now we're moving forward with meeting the needs and it all starts at the beginning, it starts at the fire academy and if you don't build a solid foundation, a lot of things can happen along the way. Looking at line of duty deaths, Alan you hit it spot on, if you have a chief that doesn't believe in this stuff, I will share with you, that I know a number of people that are on the job across the state, in some of the biggest fire departments and some of the smallest fire departments, and at the end of the day we probably have about 80% of our fire service in the state that doesn't have any type of insurance that will help them to address their mental health. I would ask you to go out and look at this before we come back and show me where there is a place somebody can call and can get help and better yet, they don't have to pay out of pocket. We're going to do great things, I'm happy about the things we worked on this morning. I'm happy that the academies are lining up, I think we fixed some things, I know that it costs a lot of money to put on academies. But I also would challenge you to do this; somehow we have to work with, what do we do to help the people who are struggling with mental health and how do we come up with a system where they can get the help they need, and it doesn't financially ruin them in the process. When you start putting finances into the equation, people stop coming to training, people stop coming to the department, it is hurting retention and recruitment, problems with marriages, there are a host of things here that we need to focus on. Thank you for all the great work this last year, it's been great to work with this council, I look forward to what we're going to do in 2021. Get Covid behind us, hopefully sooner than later. Happy Holidays everyone and we're going to continue to make the fire service better here in the state of Michigan and it all starts with every one of us stepping up and doing a little more to make it better.

d) **ADJOURNMENT:**

**20-12-12**

A **MOTION** was made by **Councilperson Janik** and seconded by **Councilperson Pettinger** to adjourn the meeting.

A roll call vote was taken.

Chairperson Tackett – yes  
Councilperson Blomstrom – yes  
Councilperson Styles – yes  
Councilperson White – yes  
Councilperson Blackmer – yes  
Councilperson Janik – yes  
Councilperson Steichen – yes  
Councilperson Pettinger – yes  
Fire Marshal Sehmeyer – yes

**MOTION PASSED UNANIMOUSLY.** The meeting adjourned at 4:08 PM.

**APPROVED:**

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Chairperson Tackett

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Councilmember

DRAFT

# "Q" COURSE APPLICATION

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, PO Box 30700, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)  
Phone: 517-241-8847

**FMQ21-001**

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

## SECTION I

<b>Name of Applicant:</b> Jacob Latson	<b>Pin Number:</b> 572780	<b>Date:</b> 01/28/2021	
<b>Host Fire Department:</b> Pittsfield Township		<b>County:</b> Washtenaw	
<b>Applicant Street Address:</b> 6227 W Michigan Ave			
<b>City:</b> Ann Arbor	<b>State:</b> MI	<b>Zip Code:</b> 48108	<b>Email:</b> latson3146@yahoo.com
<b>Applicant Phone Number:</b> 810-599-6562		<b>Alternate Number:</b> 810-599-6562	

## SECTION II

<b>Seminar/Course Name:</b> Insight Fire Training, Tactical Thermal Imaging	
<b>Instructor(s):</b> Andy Starnes, Jake Latson, Joey Baxa, Thomas Anderson	<b>Instructor Email/URL:</b> latson3146@yahoo.com
<b>Instructor Phone Number:</b> 810-599-6562	<b>Flyer Attached:</b> <input checked="" type="checkbox"/>

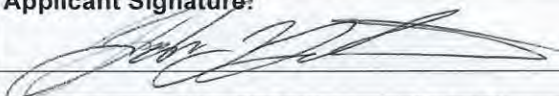
**Course Description:** (Include course syllabus and detailed course expenses-you may attach additional pages if needed)

Instruction on tactical thermal imaging, see attached for detailed information
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**Applicable NFPA Standard(s):** 1408,1801,1851,1971

<b>Class Capacity:</b> 20	<b>Total Hours of Training:</b> 8 hours and 16 hour courses
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## SECTION III

<b>Applicant Signature:</b> 	<b>Date:</b> 01/28/2021	
<b>BFS USE ONLY</b>		
<b>Date Approved by MFFTC:</b>	<b>"Q" Course Number Assigned</b>	<b>Date Course Catalog Updated</b>



**Tactical Thermal Imaging-Enhancing Fire Ground Strategies & Tactics:**

**Course Objectives and Syllabus for Basic & Advanced Tactical Thermal Imaging-Enhancing Fire Ground Strategies and Tactics:**

**Reference Materials: Information, Standards, Concepts, and Techniques are drawn from the following texts. This curriculum exceeds the standards in the following NFPA standards:**

**NFPA 1408 Standard for Training Fire Service Professional in the Operation, Care, Use, and Maintenance of Thermal Imagers (see specific requirements on the following pages)**

**NFPA 1801: Standard on Thermal Imaging Cameras for the Fire Service**

**NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting**

**NFPA 1971: Protective Garments for Structure and Proximity Firefighting**

**Information in the curriculum is drawn from the following documents:**

- NIST Amon, F., Bryner, N., and Hamins, A., “Thermal Image Research Needs for First Responders: Workshop Proceedings”, NIST Special Publication 1040, 2005.
- NIST Technical Note 1499 Performance Metrics for Fire Fighting Thermal Imaging Cameras – Small- and Full-Scale Experiments
- NIST Technical Note 1474 Thermal Environment for Electronic Equipment Used by First Responders.
- NIST Technical Note 1724 Fire Exposures of Fire Fighter Self-Contained Breathing Apparatus Facepiece Lenses.
- NIST Technical Note 1709 Examination of the Thermal Conditions of a Wood Floor Assembly above a Compartment Fire.
- Analysis of Changing Residential Fire Dynamics and Its Implications on Firefighter Operational Timeframes (UL):
- Improving Fire Safety by Understanding the Fire Performance of Engineered Floor Systems and Providing the Fire Service with Information for Tactical Decision Making (UL)
- Understanding & Fighting Basement Fires:
- Evaluation of Thermal Imaging Camera Spot Temperature Measurements in Structure Fires
- Euro Firefighter 2 by Paul Grimwood
- 3-D Firefighting by Paul Grimwood, Shan Raffel, Ed Hartin, and John McDonough

This course curriculum covers the following concepts and objectives which are listed in the following fire service documents NFPA 1408: Standard for Training

*Fire Service Personnel in the Operation, Care, Use, and Maintenance of Thermal Imagers.*

**Program-NFPA 1408 4.1.1 “A TI training program shall be implemented”-Insight Training LLC is the only recognized thermography-based fire service training curriculum internationally that is peer reviewed by Infrared Training Centers (an accredited thermography training institution). I**

**n 2020, students can register anywhere in the United States and receive a thermography based certification that meets & exceeds the two existing NFPA thermal imaging standards (NFPA 1408 and 1801). This certification is exclusively offered through Infrared Training Center and Insight Training LLC. Insight Training LLC’s materials are copyright protected, trademarked, and peer reviewed by Project Kill the Flashover (An Applied Science Research Organization).**

**Our materials are in use in the following thermal imaging manufacturer’s training programs: FLIR, Leader, Seek Thermal, Bullard, 3M Scott Safety.**

**Our work can be found in Firehouse Magazine, Fire Engineering, International Firefighter Magazine, Carolina Fire Rescue Journal, and numerous fire service websites.**



## **Insight Instructor Requirements:**

**Insight Training LLC Instructors are proficient in over 75 models of thermal imaging cameras and have published a Thermal Imaging Camera Guide to assist firefighters with understanding these specific functions. Insight Training LLC has trained thermal imaging manufacturers, salespersons, and written articles on behalf of major thermal imaging manufacturers such as FLIR, Bullard, Leader, Scott, and Seek Thermal.**

**Insight Instructors are a minimum of Level I Thermography Certified through Infrared Training Center. They are veteran fire service instructors from municipal departments from across the United States. They are certified as instructors and undergo rigorous training and education before they are allowed to serve as a lead instructor. The reading material list for an Insight Training Instructor is over 3,000 pages and takes on average of 12 months to complete the requirements prior to being allowed to serve as an instructor. They follow a strict values statement that if not adhered to will result in the loss of their employment with Insight Training LLC.**

**Each class is customized to the host organization's specific needs, brand/model of thermal imaging camera, specific time requirements, and we offer them numerous resources to continue their training and education.**

**The mission, vision, and values of Insight Fire Training are explained in the following document on the next page.**

**Mission Statement:**

Specializing in fire service training, enhancing fundamentals through education, technology, & training in context. Level 1 Thermography Certified. Our mission is to clarify the often complicated and confusing world of thermal imaging & fire behavior concepts into experientially relevant examples that firefighters can use to enhance their daily fire ground operations resulting in intelligently aggressive firefighting operations.

**Vision Statement:**

To enhance firefighting strategies and tactics to rescue victims up to 70% faster, extinguish the fire faster, and reduce firefighter injuries and deaths.

**Values:**

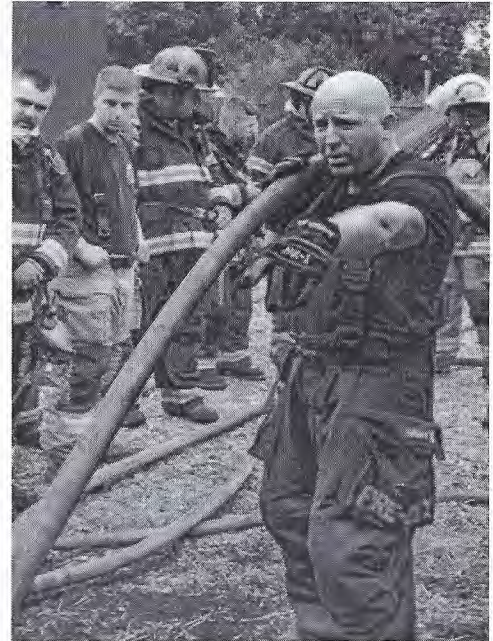
Insight Fire Training LLC values are honesty, servant hood, integrity, hard work. Our services and respective partners shall abide by these values and our values shall determine our relationships. The fire service is the people business and we are a business of creating & developing strong relationships within the fire service. We believe in lifting others up, sharing knowledge, and teaching others in ways that educate but never intimidate. In short, our instructors are to be examples of humble servants to others.





## Instructor Andy Starnes

- Level II Thermography Certified
- Internationally Recognized and Credentialed Thermal Imaging Training Program
- Insight Training LLC
- 704-507-7156



## Instructor Thomas Anderson

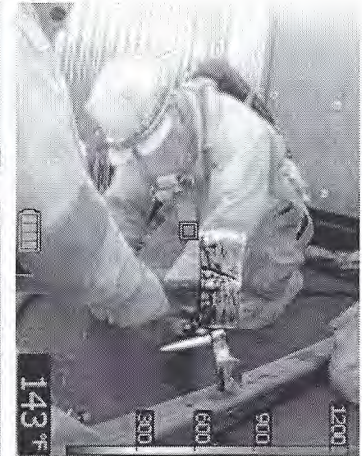
- Insight Training LLC
- Level I Thermography Certified
- 859-358-6201
- Tanderson.insight@gmail.com





## Instructor Jake Latson

- Rapid Intervention SME
- Forcible Entry, & Ladder Company Operations
- Level I Thermography Certified
- 810-599-6562
- [Latson3146@yahoo.com](mailto:Latson3146@yahoo.com)



## Instructor Joey Baxa

- 14-year Veteran of the Fire Service
- Captain with Buckhannon FD
- Level I Thermography Certified
- Adjunct Instructor at WVU



## Course Objectives & Syllabus: 8 hour Introduction Course.

This program is designed to be offered via a classroom and with a Max Fire Box for Fire Behavior Demonstrations.

- Students will learn the key attributes of thermal imaging: Field of view, temperature modes and associated color palettes specific to the brand of TIC their organization uses.
- Students will learn the functional modes (application based), Resolution and how it affects their decision-making abilities (image clarity and how it is affected by environmental factors), Distance to Spot Ratio (how the environment and distance affects this) and Emissivity.
- Students will also learn advanced features or options: Specific features of their specific brand of thermal imaging camera that are considered optional are covered in the lecture portion such as: hot spot tracker, image enhancement (otherwise known as interpolation shown in the above image), zoom features, video/picture options etc.
- Students will learn understanding Thermal Severity specifically how heat, temperature, and heat flux affect their performance, their PPE, and fire growth. Concepts such as thermal classifications, PPE failure rates, and the human body's inability to discern temperature accurately will be explained in depth. This is evidence-based data and is cited via research documents and Line of Duty Death Reports.
- The student will learn the differences between the two predominant types of Fire Service TIC's: Situational Awareness TIC's and Decision-Making TIC's. Specific manufacturer examples and their specifications will

be shown along with examples of correct & incorrect use of both types of Thermal Imaging Cameras.

- Individual and department specific examples of these TIC's will be shown in an easy to use and interpret format for training and education use. The key attributes of each brand specific TIC are listed, explained, and differences are shown in these areas in various models.
- Thermal Imaging Contraindications: Students learn the contraindications of TI use-reflections (glass, metal, and low emissive materials), inability to see through flames, danger of uniform temperatures, cold smoke and moisture effects on TI, misinterpretation (user error), spot temperature contraindications, well insulated objects and thermal bridges, and false readings (emissive materials and thermal inversion).
- Application: Students will cover a variety of Tactical TIC use in the environment firefighters work in such as: Size-up, Fire Attack (line placement and directing hose streams), Search & Rapid Intervention, Accountability and Orientation, Preventing Thermal Insult, Ventilation, Overhaul, Exposure Protection.
- Also, examples will be given to cover use in the following areas: Motor vehicle accidents, Down Power lines & electrical emergencies, Hazardous Material Incidents, Water Rescues, Wildland Fire applications, Preplanning and building construction. Students will focus primarily on fire ground applications in the areas of measuring heat, size-up, locating the fire & directing suppression efforts, enhanced search methodology, and ventilation efforts.

## **Intermediate 8 hour Classroom & Live Fire Training Objectives:**

Students will cover the aforementioned materials in the introduction class in a four classroom followed by four hours of live fire training consisting of the following objective driven learning stations:

**The following live fire conditions will be prepared in a three-station format, so the students may rotate through consecutively.**

**Station 1:** Tactical 360-Enhanced Size-up: Students will be escorted by an instructor and conduct a proper 360-degree survey and note the thermal cues they were taught previously. Each student will note the hottest area, the coldest area, points of egress (check them for victims, building lay-out, and location of fire), and they will define their entry point based on this information.

**Station 2:** Go/No Go Decision Making- A team of three firefighters escorted by one instructor will move to their determined entry point, ensure all PPE is in place, and note any thermal cues upon the entry area. The door will be cooled per the FKTP protocols and then the door will be opened. Once the doorway has been opened, the crew leader will scan the entry point and determine the fires location/severity, note any of the four mitigating factors of the Go/No-Go Decision Model and act upon them accordingly, and then they will direct the nozzle man to cool the environment where they are and where they are going. The crew leader will then direct the nozzle man to move to the next designated area.

**Station 3:** Enhanced Stream Placement-The crew leader will then move in behind their crew confirming the area has been cooled less than 500 degrees and check for any areas of significant heat that may have been missed. They will scan and identify the target area/direction and check for any possible holes in the floor. The crew leader will then communicate and guide the nozzle man's efforts to cool the next target space they are moving to.

## **Advanced Comprehensive 16 hour Course Objectives:**

**Day 1: Students will participate in a four lecture followed by four hours of live fire training. This training will consist of an orientation burn with the Max Fire Box followed by objective driven learning stations in the following areas:**

- **Tactical 360:** Detect the fire, define their access point (Check for victims first), Define the building lay-out and any possible victims that need to be rescued.
- **Go/No Go Decision Making:** Entry will be made based on the Go/No Go Decision Making Model
- **Enhanced Stream Placement:** Streams will be guided by the crew leader and each area will be cooled, confirmed, and checked before moving forward.
- **Enhanced Search Methodology:** A victim (rescue mannequin) will be placed in close proximity to the fire room and the crew leader will be responsible for locating it, communicating their finding, and their strategy for removal.
- **Enhanced Situational Awareness:** Upon completion of the evolution, the crew leaders and other firefighters will be instructed to power down their thermal imaging camera, define a secondary means of egress, and then lead their crew out of the fire environment without the assistance of the TIC.



**Day 2: Students will report to training grounds and complete a morning session of the following objective driven learning stations:**

- **Multiple Victim Search & Rescue with Fire Attack: Students will be shown how to accomplish fire attack and rescue simultaneously.**
- **Vent Enter Search: Students will complete several vent, enter, search scenarios with victim removal.**
- **Rapid Intervention: Students will review rapid intervention procedures, assessment techniques, and removal procedures.**

**In the afternoon students will be divided into teams and be given one of three scenarios to complete where they must apply the concepts, they have learned in the past two days:**

- **Size-up, develop an IAP, fire attack with a victim rescue/removal**
- **Size-up, develop an IAP, fire attack with a MAY-DAY declared**
- **Size-up, develop an IAP, VES of multiple windows with victims trapped above the fire.**



## Insight Fire Training Tactical Thermal Imaging Lesson Plan

### **DAY 1: GETTING FAMILIAR WITH YOUR TIC: UNDERSTANDING FIELD OF VIEW (F.O.V): UNDERSTANDING THE OBSERVABLE WORLD WITHIN THE VIEW OF THE THERMAL IMAGING CAMERA.**

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	<p>Understanding Field of View:                      Field of View: Each student will see the difference in changing their F.O.V. and how this can benefit their tactics</p>	<p><b>Field of view</b> is the extent of the observable world that is seen at any given moment. The student will see how the TIC's F.O.V. is different than their optical F.O.V. and its limitations</p>
<b>INFORMATION</b>	<p>Explain how the TIC's F.O.V is oriented (Vertical x Horizontal) and demonstrate how it diminishes the firefighter's vision if they do not scan properly (wall to wall versus shoulder to shoulder)</p>	<p>Explain the particular brand of TIC's F.O.V. and show the difference in scanning up close vs further from the target.</p>
<b>CONCEPTS</b>	<p>Standard Grip vs. Alternative                      Full Scan versus Partial Scan.                      Thermal cues &amp; Signs of Victims</p>	<p>Student learns the advantage of changing their grip to gain a wider perspective and how to scan appropriately.</p>
<b>ACTIVITY</b>	<ul style="list-style-type: none"> <li>• Doorway Scan</li> <li>• 6-sided scan</li> <li>• Hallway Scan</li> </ul>	<p>Students learn the value of proper and improper scanning.</p>

## **OVERVIEW: UNDERSTANDING TEMPERATURE MODES**

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	Understanding Temperature Sensitivity. No TIC can see all temperatures in one Span (temperature range).	Each Student will perform a scan with their respective Thermal Imaging Camera and notice the difference from High Sensitivity to Low Sensitivity.
<b>INFORMATION</b>	Explain the difference in High & Low Sensitivity, its importance to proper interpretation of the environment, how focal point affects it. Non-Negotiables: <b>No standing up in the thermal environment!</b>	“Most modern IR cameras break up the total measurement into a number of defined temperature ranges covering intervals of temperature that the detector is able to detect without going into saturation” (which used to be known as white-out). ITC Manual p. 5-5
<b>CONCEPTS</b>	Demonstrating the differences in discernable details in each mode. High Sensitivity equals High Detail. Low Sensitivity equals Low Detail. Room configuration and details will appear quite differently in Low Sensitivity	Students will scan the room adjacent to the fire room moving from relatively low heat objects within their F.O.V. to objects over 300 degrees F (150 degrees Celsius) to cause the TIC to switch modes.

<p>ACTIVITY:</p>	<p>Students will be gathered on their knees where they can view the entire room adjacent to a fire room that is an incipient stage fire. Instructors will guide them to scan the room staying low then scanning high near the heat source.</p>	<p>Students will learn the difference of discernable details in High Sense versus Low Sense. They will also note the colors that appear in low sense. They will provide the instructor feedback on what stage the fire is in, it's location, secondary means of egress, and potential victims.</p>
<p>SUMMARY:</p>	<p>Instructors will review temperature sensitivity (H/L), proper interpretation &amp; reading the color palette, and situational awareness.</p>	<p>Students will understand:</p> <ul style="list-style-type: none"> <li>• Over 150 Celsius/300 Fahrenheit incurs mode change.</li> <li>• Focal point matters</li> <li>• Reading the Color Palette</li> </ul>



**INSIGHT**  
FIRE TRAINING

**OVERVIEW: UNDERSTANDING THE IMPORTANCE OF RESOLUTION:**

**THE STUDENTS WILL SCAN THE FIRE ENVIRONMENT AT THREE PRESET DISTANCES AND NOTE THE DIFFERENCE IN THE RESOLUTION IN THEIR RESPECTIVE TIC'S AND HOW THIS CAN AFFECT THEIR DECISION-MAKING PROCESS.**

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	Instructor will explain the importance of knowing a TIC's specific resolution and how it explains a firefighter's ability to interpret the environment.	The student will have 2-3 thermal imaging cameras with varying resolutions to be able to see & comprehend the learning objectives.
<b>INFORMATION</b>	Instructor will show a 160x120 resolution TIC, a 320x240 resolution TIC, a 384x288 resolution TIC. These will show the varying abilities of each camera. A firefighter's hand will be the target at 7', 15', and 20'.	Students will see how at varying distances they can 'miss' a victim and also how it affects their ability to see convective heat currents and room configuration.
<b>CONCEPTS</b>	The Instructor will explain how the difference in pixels affects the overall visual interpretation: 20,000 pixels, 80,000 pixels, and over 100,000 pixels.	Students will hold the various TIC's and see these concepts for themselves.

# Insight Fire Training Thermal Imaging Training Lesson Plan

## Insight Fire Training Thermal Imaging Training Lesson Plan

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**Emissivity Demonstration:** Defining Emissivity from a practical perspective and how it affects their thermal imaging interpretation. *“A characteristic of the radiating surfaces and gases called emissivity affects how the thermal radiation intensity relates to the actual temperature in a way that can make the surface or gas appear to have a temperature that is different from reality”* (NIST Technical Note 1499, p.13)

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	Instructor will explain what Emissivity is, how the TIC calculates surface temperatures based on .95 emissivity, and how varying surfaces can be providing false readings to the TIC user.	Student will provide tangible examples of objects of low & high emissivity.  Low Emissivity: (Shiny) Zero High Emissivity: (Matte) One
<b>INFORMATION</b>	The Instructor will scan the room and pick out objects of low emissivity. These objects will show different temperatures than the actual fire environment.	The students will scan the room and identify objects of varying emissivity. Objects of lower emissivity reflect energy well whereas objects of higher emissivity absorb and or emit energy very well.
<b>CONCEPTS</b>	The instructor will explain how objects of low emissivity cannot be trusted and how they can “mislead” a firefighter.	Students will note items of higher emissivity and their associated temperature and compare them to objects of lower emissivity.

## Insight Fire Training Thermal Imaging Training Lesson Plan

ACTIVITY	A shiny metal object, a sheet of glass, and a wet floor will be used in close proximity of the fire room and the students will be shown how to interpret the image and differentiate from a reflection and a true heat source	This scenario will allow the students to see how shiny objects such as a stainless-steel kitchen could lead them astray.
SUMMARY	Instructor will provide experientially relevant examples of how emissivity affects our strategies and tactics: fires behind windows, victims behind glass, fire reflecting off of shiny surfaces etc.	This time will be used for students to discuss any incidents where this may have occurred to them or how they can use this information on the fire ground.

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## Insight Fire Training Thermal Imaging Training Lesson Plan

**MRTD-The Danger of Uniform Temperatures:** Many fire service TIC's respond well in the fire room or near active flaming but in the adjacent areas of a fire environment a firefighter will encounter areas of uniform temperatures where the room has been uniformly heated. In these areas, if a TIC has a high MRTD (minimum resolvable temperature difference) rating, which is measured in mK or milli-Kelvin, then the TIC will NOT be able to easily differentiate between two or more objects of similar temperatures. This can also be listed in a thermal imaging manual as thermal sensitivity, Minimum Discernable Temperature Difference (MDTD), NETD Noise Equivalent Temperature Differential (See Glossary in Manual for further explanation).

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	Instructors will explain thermal sensitivity and how it applies to the fire ground, searching for victims/downed firefighters, and situational awareness.	Students will note the varying levels of sensitivity of their TIC at different temperature modes and the ability or lack thereof to discern images of similar temperature.
<b>INFORMATION</b>	When a TIC views an area of uniform temperatures (areas that are all heated to approximately the same temperature) it sees very little discernable details.	Students will learn ways to create contrast using water, changing their focal point, and placing a firefighter in their field of view.
<b>CONCEPTS</b>	Uniform Temperature environments can lead to missed thermal cues, missed victims, and a false sense of security. Instructors will explain to use techniques to create contrast.	Students will view the evenly heated environment and note how easily firefighters can blend in with the background.



## Insight Fire Training Thermal Imaging Training Lesson Plan

ACTIVITY	An Instructor will place his back to the wall at a preset distance and the students will attempt to locate the instructor before they turn around.	An Instructor will place his back to the wall at a preset distance and the students will attempt to locate the instructor before they turn around and see the contrast in their SCBA.

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# Insight Fire Training Thermal Imaging Training Lesson Plan

**Intermediate Lesson Plan: Learning Stations-The following live fire conditions will be prepared in a three-station format so the students may rotate through consecutively.**

**Station 1:** Tactical 360-Enhanced Size-up: Students will be escorted by an instructor and conduct a proper 360-degree survey and note the thermal cues they were taught previously. Each student will note the hottest area, the coldest area, points of egress (check them for victims, building lay-out, and location of fire), and they will define their entry point based on this information.

	<b>INSTRUCTOR GUIDE</b>	<b>STUDENT GUIDE</b>
<b>OBJECTIVES</b>	Instructors will explain how to recognize thermal cues, thermal bridges, review building construction, and basic fire behavior.	Students will note the slight thermal cues that provide cues & clues of the fires location, will see the issues with reflected apparent temperature, detect/define the fire's location & severity
<b>INFORMATION</b>	Instructors will show the students to check the entrance/egress points, Detect the fire, define their access point, Define the building lay-out and any possible victims that need to be rescued and then proceed with the 360-degree survey	Students will view the structure from an appropriate distance, check the entrance/egress points, assess the building tactically, thermally, & then 3-dimensionally

## Insight Fire Training Thermal Imaging Training Lesson Plan

CONCEPTS	Thermal Bridges, Scanning High, Medium & Low, watching for 3Dimensional hazards, Noting Hottest & Coldest areas, forecasting fire growth	Students will see examples of thermal bridges (windows, dryer vents, doors etc.), Note power lines, utilities, flow path identification and forecast fire growth
SUMMARY	After 360 is completed, the instructor will provide an example of the IAP, communicate this to the firefighters and any additional responding units prior to making entry.	Students will practice giving their size-up based on the Insight model including the tactical, thermal, and three- dimensional factors they observe.

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## Insight Fire Training Thermal Imaging Training Lesson Plan

**Station 2: Go/No Go Decision Making-** A team of three firefighters escorted by one instructor will move to their determined entry point, ensure all PPE is in place, and note any thermal cues upon the entry area. The door will be cooled per the FKTP protocols and then the door will be opened. Once the doorway has been opened, the crew leader will scan the entry point and determine the fires location/severity, note any of the four mitigating factors of the Go/No-Go Decision Model and act upon them accordingly, and then they will direct the nozzle man to cool the environment where they are and where they are going. The crew leader will then direct the nozzle man to move to the next designated area

	<b>INSTRUCTORS</b>	<b>STUDENTS</b>
<b>OBJECTIVES</b>	Instructors will explain the key 4 points of Go/No Go Decision Making Model, how to recognize them tactically and thermally, and how to interpret the information on the TIC correctly.	Students will observe an example of No/Go, proper interpretation, mitigating the four factors, and the importance of continual assessment
<b>INFORMATION</b>	<ul style="list-style-type: none"> <li>• Go/No Go is evidence based</li> <li>• Turbulent smoke</li> <li>• Descending Neutral Plane/Thermal Gradient</li> <li>• Reducing Overall Temperatures- below 500 degrees</li> <li>• Ability to view the data on the TIC oversaturation, white out, TIC failure.</li> </ul>	Students will be given examples of these four factors and how they affect fire growth thereby emphasizing its importance in mitigating them to prevent rapid fire growth and/or thermal insult
<b>CONCEPTS</b>	<ul style="list-style-type: none"> <li>• Go/No Go Decision Model</li> <li>• Reading Smoke versus Interpreting IR Data</li> <li>• Thermal Gradient</li> <li>• Fire Growth correlation to HRR and ventilation</li> </ul>	Students will repeat the model as they complete the exercise. Instructors will verify that their readings/interpretations are correct.

## Insight Fire Training Thermal Imaging Training Lesson Plan

**Station 3: Enhanced Stream Placement**-The crew leader will then move in behind their crew confirming the temperatures have been reduced to less than 500 degrees and check for any areas of significant heat that may have been missed (e.g. behind them & in corners). They will scan and identify the target area/direction of travel and check for any possible holes in the floor. The crew leader will then communicate and guide the nozzle man's efforts to cool the next target space they are moving to.

	INSTRUCTORS	STUDENTS
Objectives	To explain & emphasize the value of a directed stream versus a pattern of applying water without guidance. Enhanced Stream Placement is based on Efficiency.	Students learn the value of applying the water where it is needed versus applying water improperly and where it is not needed.
Information	Instructors will point out the superheated areas that need to be cooled prior to their approach, cooling the environment where they are, and confirming the area the heat is "erased" not penciled.	Students will clearly see the superheated areas that need to be addressed and will direct the nozzle man's efforts accordingly then instruct the nozzle man to move forward to the area that has been cooled.
Concepts	<ul style="list-style-type: none"> <li>• Detect/Define the area that needs to be cooled.</li> <li>• Direction/communication of those efforts</li> <li>• Confirm the area has been cooled.</li> <li>• Communicate movement to the next point.</li> </ul>	Student will understand the value of knowing the temperature, stream direction, enhanced stream placement, and never move to another area without sending water their first.

# Insight Fire Training Thermal Imaging Training Lesson Plan

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## **Two Day (16 Hour) Advanced Comprehensive Scenario/Full Evolutions Lesson Plan:**

The firefighters will be divided into teams and two teams will work together to perform each scenario. The scenario will consist of the teams completing the following learning objectives:

- **Tactical 360**: Detect the fire, define their access point (Check for victims first), Define the building lay-out and any possible victims that need to be rescued.
- **Go/No Go Decision Making**: Entry will be made based on the Go/No Go Decision Making Model
- **Enhanced Stream Placement**: Streams will be guided by the crew leader and each area will be cooled, confirmed, and checked before moving forward.
- **Enhanced Search Methodology**: A victim (rescue mannequin) will be placed in close proximity to the fire room and the crew leader will be responsible for locating it, communicating their finding, and their strategy for removal.
- **Enhanced Situational Awareness**: Upon completion of the evolution, the crew leaders and other firefighters will be instructed to power down their thermal imaging camera, define a secondary means of egress, and then lead their crew out of the fire environment without the assistance of the TIC

Each stage of the evolution will be walked through (a dry run with no fire) with the instructors ensuring that the students understand what their objectives are. The fire's will be controlled by safety crews to allow students the time to observe the concepts of the lesson plan.

# Insight Fire Training Thermal Imaging Training Lesson Plan

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## Course Cost and Logistical Needs Requirements:

Introduction Course: The eight hour classroom and max fire box demonstration training will be offered at \$1500/day plus mileage and lodging if necessary.

Intermediate Course: The eight hour classroom/live fire training offering will include two instructors with 20 students for \$3,000 per day plus mileage and lodging.

Advanced Course: The two day (16 hour) classroom/live fire training will include two instructors with 20 students for \$6,000 total plus mileage and lodging.

The host organization will provide the following:

- SCBA(s) and facepiece(s) for the instructors for the live fire component. Insight Training will provide all other PPE, thermal imaging cameras, and necessary equipment for their instructors.
- NFPA 1403 requirements must be met. The host organization will provide a live fire training center or acquired structure with the proper safety requirements including live fire instructor for safety and ignition officers.

Insight Training will provide the following for each course:

- Customized PowerPoint Presentation (a copy will be given to the host organization)
- Student manual in a PDF format. The host organization is responsible for printing costs.
- A resource folder either in the form of a flash drive or a custom drop box folder for further education and training.

# Insight Fire Training Thermal Imaging Training Lesson Plan

## Summary:

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*Insight Training LLC's Tactical Thermal Imaging Curriculum offers from introductory level to a full 32-hour learning experience that correlates industrial thermography concepts into fire service relevant examples. The curriculum has been used and taught around the globe. Our work can be found in Fire Engineering, Fire House Magazine, Fire Apparatus, various online platforms, and in Euro Firefighter 2 by Dr. Paul Grimmwood. Our program is copyright protected, peer reviewed by Project Kill the Flashover and a third party thermal imaging manufacturer for accuracy and credibility.*

*We would be honored if you consider our team of Level 1 Thermography Certified Veteran Fire Service Instructors to assist your organization with enhancing fire ground strategies and tactics through Tactical Thermal Imaging. Thank you for considering us and taking the time to learn about our course*



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*curriculum. Please let us know if we can be of assistance to your organization.*





# “Q” COURSE APPLICATION

FMQ21-002

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, Fire Fighter Training Division  
2407 N. Grand River, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).


## SECTION I

Name of Applicant:		SMOKE PIN:	Date:
Host Fire Department:			County:
Applicant Street Address:			
City:	State:	Zip Code:	Email:
Applicant Phone Number:		Alternate Number:	

## SECTION II

Seminar/Course Name:	
Instructor(s):	Instructor Phone Number:
Instructor Email/URL:	Flyer Attached:
<b>Course Description:</b> (Include course syllabus and detailed course expenses-you may attach additional pages if needed)  <i>Often times organizations get personnel trained in Critical Incident Stress Management (CISM) and they don't know what to do once the team has been established and the team fails. This program will educate existing team members on how to move their team in the right direction and up to the next level so as to be successful in the day to day operations of their organization for the wellness of everyone. We will help you with the development of ongoing educational programs for your peers, their loved ones and your team and you will be educated on what is and what isn't working in sustaining active and successful peer support teams. Attendees will be given the tools and resources to encourage communication, build trust and maintain a healthy, active and effective peer support team. (See attached outline for course syllabus)</i>  <i>Course cost varies based on location</i>	
Applicable NFPA Standard(s):	
Class Capacity:	Total Hours of Training:

## SECTION III

Applicant Signature: 		Date:
<b>BFS USE ONLY</b>		
Date Approved by MFFTC:	“Q” Course Number Assigned:	Date Course Catalog Updated:

## Michigan EMS Continuing Education Credits: 2

### Rationale For Presentation

Often times organizations get personnel trained in Critical Incident Stress Management (CISM) and they don't know what to do once the team has been established and the team fails. This program will educate existing team members on how to move their team in the right direction and up to the next level so as to be successful in the day to day operations of their organization for the wellness of everyone.

### Training Summary

Whether you are just launching a peer support team, or you've been operating for a while, You're going to need buy in from the different entities, continuing education for team members and trust throughout all levels of the organization most importantly, your peers. This course will help you with the development of ongoing educational programs for your peers, their loved ones and your team! You will be educated on what is and what isn't working in sustaining active and successful peer support teams and you will be given the tools and resources to encourage communication, build trust and maintain a healthy, active and effective peer support team.

### Cognitive Objectives

- I. Discuss and understand the importance of daily involvement by the peer team members in the daily operations of the organization.
- II. Discuss and understand the objectivities, differences, uses and limitations for Critical Incident Stress Management (CISM) and peer support team.
- III. Understand the importance of team confidentiality.
- IV. Understanding the goals, guidelines and protocols of a successful team.
- V. Understand the various types of stressors first responders are being exposed to and when to utilize the team.
- VI. Discuss and recognize suicide, post traumatic stressors and high-risk behaviors and warning signs.
- VII. How to get the positive organizational buy-in from top to bottom.
- VIII. The triangle for success!
- IX. Staying healthy as a team member.

### Instructors Credentials

**Michael Wierenga** has over 25 years of law enforcement experience combined with 18 years as a firefighter and over 5,500 hours of classroom and practical skill instruction in police, fire and EMS departments. Mike's training and experience includes 450 hours of critical-incident stress management programs combined with an immeasurable number of front-line applications in line-of-duty deaths, officer-involved shootings, suicides, violent tragedies and deaths. Mike is an active team leader with his departments peer support CISM team and was instrumental in the creation and implementation of a wellness educational program for responders and their families.

#### Work Experience:

- 18 years Firefighter
- 25 years Police Officer
- Grand Rapids Police Peer Support Team Member
- Emergency Vehicle Operations Coordinator
- In-Service & Recruit Coordinator & Training Instructor
- Michigan State Police Precision Driving Instructor
- Grand Valley State University Instructor
- Grand Rapids Community College Instructor

#### Certifications:

- FFTC Firefighter I/II
- Michigan Commission on Law Enforcement Standards (MCOLES)
- Field Training Officer (FTO)
- Critical Incident Peer Support
- CISM: Individual Crisis Intervention
- CISM: Advanced Group Crisis Intervention & Peer Support
- CISM: Trauma to Addictions
- CISM: Line of Duty Death: Preparing for the Worst
- CISM: Suicide Prevention, Intervention & Postvention
- CISM: Team Evolution & Management
- Disaster Behavioral Health Services
- TBL: Death Notifications & Funeral Protocol
- Vistelar Verbal Defense & Influence Instructor

## Outline

- I. Introduction
- II. Facts & Statistics
- III. Critical Incident Stress Management (CISM)
  - a. Definition
  - b. Objectives
  - c. Limitations
- IV. Peer Support Team
  - a. Definitions
  - b. Objectives
  - c. Limitations
  - d. Differences from CISM
- V. Incident Management
  - a. Defusing
  - b. Debriefing
  - c. One on One
- VI. Command Staff Expectations
- VII. Team Organization
- VIII. Senate Bill 444
  - a. Union support
- IX. Building trust, confidence, approachability & relationships
  - a. Peers
  - b. Organization
  - c. Loved ones
  - d. Employee assistance program (EAP)
  - e. Human resources
- X. Team Awareness
  - a. Obstacles
  - b. Elements for success
  - c. What's changed?
  - d. Daily monitoring & activity
- XI. Team Knowledge
  - a. Policies, guidelines, procedures & protocols
  - b. Types of Stress
    - i. Acute
    - ii. Critical incident
    - iii. Post-traumatic
    - iv. Secondary
    - v. Accumulative
  - c. High Risk Behaviors
    - i. Recognition
    - ii. Follow ups
    - iii. Options
- XII. Continuing Education Programs
  - a. Team members
  - b. Peers
  - c. New hires
  - d. Command staff
  - e. Front line supervisors
  - f. Loved ones
- XIII. Team Members Wellness Protocols
- XIV. Conclusion & Resources

- Michigan State Police Advanced Precision Driving
- Ohio Peace Officers Training Commission Pursuit Intervention Techniques Instructor
- Stop Stick Instructor
- SKIDCAR SYSTEMS Instructor
- Simunitions Scenario Instructor
- Reid Interview & Interrogation
- Street Officers & Terrorism
- DWI Detection & Sobriety Testing

### Other:

- “Predicting Violence & Influencing Outcomes”
- Police Magazine Contributor
- “Bulletproof Mind”
- “Emotional Survival for Law Enforcement”

*Terry Bykerk* has 25 years of law enforcement experience that includes standard operating guidelines liability & implementation, training program development and adult learner advancement with over 5000 hours of classroom and practical skill instruction in area colleges, universities, hospitals, fire and police departments.

### Work Experience:

- 25 years Police Officer
- Emergency Vehicle Operations Coordinator
- In-Service & Recruit Training Coordinator Instructor
- Michigan State Police Precision Driving Instructor
- Grand Valley State University Instructor

### Certifications:

- Michigan Commission on Law Enforcement Standards (MCOLES)
- MACNLOW Police Supervision
- Field Training Officer (FTO)
- Field Training Associates (FTA) Advanced Coaching Strategies
- Michigan State Police Advanced Precision Driving
- Ohio Peace Officers Training Commission Pursuit Intervention Techniques Instructor
- Stop Stick Instructor
- Gryphon Group Advanced Executive Protection

### Other:

- “Bulletproof Mind”
- “Survival for Law Enforcement”



# "Q" COURSE APPLICATION

FMQ21-003

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, Fire Fighter Training Division  
2407 N. Grand River, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).


## SECTION I

Name of Applicant:		SMOKE PIN:	Date:
Host Fire Department:			County:
Applicant Street Address:			
City:	State:	Zip Code:	Email:
Applicant Phone Number:		Alternate Number:	

## SECTION II

Seminar/Course Name:	
Instructor(s):	Instructor Phone Number:
Instructor Email/URL:	Flyer Attached:
<b>Course Description:</b> (Include course syllabus and detailed course expenses-you may attach additional pages if needed)  <i>This frontline experience-based wellness training is designed for first responders, their loved ones, organizational leaders and peer support team members and will address suicide, post traumatic stresses, secondary trauma and cumulative career exposures. Whether you have been in this field three weeks or 30 years you will be given life changing tools to be safe, successful &amp; healthy in your career, as a peer for those working alongside you and into your personal life and retirement years. Attendees will have a discussion on why the suicide rates are so high within first responders' cultures. Responders, formal and informal leaders and families will learn realistic and proven life changing techniques to recognize high risk warning signs and will leave having a better understanding of the Post Traumatic Stressors and how they affect the safety of everyone within the organization and their personal lives. (See attached outline for course syllabus)</i>  <i>Course cost varies based on location</i>	
Applicable NFPA Standard(s):	
Class Capacity:	Total Hours of Training:

## SECTION III

Applicant Signature: 		Date:
<b>BFS USE ONLY</b>		
Date Approved by MFFTC:	"Q" Course Number Assigned:	Date Course Catalog Updated:

## Michigan EMS Continuing Education Credits: 3

### Rationale For Presentation

This frontline experience-based wellness training is designed for first responders, their loved ones, organizational leaders and peer support team members and will address suicide, post traumatic stresses, secondary trauma and cumulative career exposures. Whether you have been in this field three weeks or 30 years you will be given life changing tools to be safe, successful & healthy in your career, as a peer for those working alongside you and into your personal life and retirement years.

### Training Summary

Attendees will have a discussion on why the suicide rates are so high within first responders' cultures. Responders, formal and informal leaders and families will learn realistic and proven life changing techniques to recognize high risk warning signs and will leave having a better understanding of the Post Traumatic Stressors and how they affect the safety of everyone within the organization and their personal lives.

### Who Should Attend

Command officers, supervisors, police officers, deputy sheriffs, state troopers, public safety officers, fire fighters, medical first responders, correctional officers, dispatchers, peer support team members and their loved ones such as spouses, fiancés, boyfriends and girlfriends, parents, adult children, siblings and friends.

### Cognitive Objectives

- I. Do the daily environmental stressors and its long-term effects drive a responder to post traumatic stressors and or suicide?
- II. Discuss and understand the difference between Post Traumatic Stress Reactions verse Post Traumatic Stress Disorder.
- III. Discuss and gain knowledge of the natural biological process of the adrenaline rush and dump and how your reaction can be more powerful if your exposed to trauma during the adrenaline highs.
- IV. Discuss and understand why your work life and personal life have very different looks and how they are essential for your career survival.
- V. Discuss and recognize the high-risk warning signs of individual and relationship destruction, depression, and loss of control in their personal life.

### Instructors Credentials

**Michael Wierenga** has over 25 years of law enforcement experience combined with 18 years as a firefighter and over 5,500 hours of classroom and practical skill instruction in police, fire and EMS departments. Mike's training and experience includes 450 hours of critical-incident stress management programs combined with an immeasurable number of front-line applications in line-of-duty deaths, officer-involved shootings, suicides, violent tragedies and deaths. Mike is an active team leader with his departments peer support CISM team and was instrumental in the creation and implementation of a wellness educational program for responders and their families.

#### Work Experience:

- 18 years Firefighter
- 25 years Police Officer
- Grand Rapids Police Peer Support Team Member
- Emergency Vehicle Operations Coordinator
- In-Service & Recruit Coordinator & Training Instructor
- Michigan State Police Precision Driving Instructor
- Grand Valley State University Instructor
- Grand Rapids Community College Instructor

#### Certifications:

- FFTC Firefighter I/II
- Michigan Commission on Law Enforcement Standards (MCOLES)
- Field Training Officer (FTO)
- Critical Incident Peer Support
- CISM: Individual Crisis Intervention
- CISM: Advanced Group Crisis Intervention & Peer Support
- CISM: Trauma to Addictions
- CISM: Line of Duty Death: Preparing for the Worst
- CISM: Suicide Prevention, Intervention & Postvention
- CISM: Team Evolution & Management
- Disaster Behavioral Health Services
- TBL: Death Notifications & Funeral Protocol
- Vistelar Verbal Defense & Influence Instructor

- VI. Discuss and recognize the high-risk warning signs of an individual struggling with post-traumatic stress, PTSD, cumulative stressors and suicide.
- VII. Understand and learn the signs to emotional, physical and relationship secondary traumas that are affecting you at home.

## Outline

- I. Introduction
- II. First Responder Facts
- III. Awareness
  - a. The “Terrible Ten”
  - b. High risk responders
  - c. Suicide signs & symptoms
  - d. PTS signs & symptoms
  - e. Cultural changes are a must!
  - f. Cumulative & secondary stress responses
- IV. Knowledge
  - a. Adrenaline rush and dump
  - b. Support systems
    - i. Organizational
    - ii. Family
    - iii. Exterior
  - c. How does a critical incident work?
    - i. PTS reactions
    - ii. PTSD
    - iii. Is it accumulative?
- V. High Risk Suicide Warning Signs
  - a. Problem recognition
  - b. Depression, loss of control & suicide
  - c. Intervention
  - d. High risk years of service
- VI. Keys for Survival
  - a. Maintain control
    - i. Organization’s leadership
    - ii. Paradigm shift
    - iii. Peer support role
  - b. Reinforce sense of self
    - i. What are you made up of?
    - ii. Daily self-inventory: What has changed?
  - c. Department and personal accountability
    - i. Levels & various treatment options
      - a. Professional
      - b. Personal
  - d. The importance of communication
    - i. Organizational perspective
    - ii. Responder’s perspective
    - iii. Spouses perspective
- VII. Case Studies
  - a. PTS
  - b. PTSD: Ended my career!
  - c. Suicide
- VIII. Conclusion
  - a. Questions & resources

- Michigan State Police Advanced Precision Driving
- Ohio Peace Officers Training Commission Pursuit Intervention Techniques Instructor
- Stop Stick Instructor
- SKIDCAR SYSTEMS Instructor
- Simunitions Scenario Instructor
- Reid Interview & Interrogation
- Street Officers & Terrorism
- DWI Detection & Sobriety Testing

### Other:

- “Predicting Violence & Influencing Outcomes”
- Police Magazine Contributor
- “Bulletproof Mind”
- “Emotional Survival for Law Enforcement”

*Terry Bykerk* has 25 years of law enforcement experience that includes standard operating guidelines liability & implementation, training program development and adult learner advancement with over 5200 hours of classroom and practical skill instruction in area colleges, universities, hospitals, fire and police departments.

### Work Experience:

- 25 years Police Officer
- Emergency Vehicle Operations Coordinator
- In-Service & Recruit Training Coordinator Instructor
- Michigan State Police Precision Driving Instructor
- Grand Valley State University Instructor

### Certifications:

- Michigan Commission on Law Enforcement Standards (MCOLES)
- MACNLOW Police Supervision
- Field Training Officer (FTO)
- Field Training Associates (FTA) Advanced Coaching Strategies
- Michigan State Police Advanced Precision Driving
- Ohio Peace Officers Training Commission Pursuit Intervention Techniques Instructor
- Stop Stick Instructor
- Gryphon Group Advanced Executive Protection

### Other:

- “Bulletproof Mind”
- “Survival for Law Enforcement”



# "Q" COURSE APPLICATION

FMQ21-004

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, Fire Fighter Training Division  
2407 N. Grand River, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

## SECTION I

<b>Name of Applicant:</b>		<b>SMOKE PIN:</b>	<b>Date:</b>
<b>Host Fire Department:</b>			<b>County:</b>
<b>Applicant Street Address:</b>			
<b>City:</b>	<b>State:</b>	<b>Zip Code:</b>	<b>Email:</b>
<b>Applicant Phone Number:</b>		<b>Alternate Number:</b>	

## SECTION II

<b>Seminar/Course Name:</b>	
<b>Instructor(s):</b>	<b>Instructor Phone Number:</b>
<b>Instructor Email/URL:</b>	<b>Flyer Attached:</b>
<b>Course Description:</b> (Include course syllabus and detailed course expenses-you may attach additional pages if needed) <p>A trench/excavation rescue is a very dangerous situation for everyone involved. First responders need to know what those dangers are before they respond to an emergency. This course is designed to inform responders, leaders, and industry professionals to the dangers of trench and excavation emergencies. Through a combination of classroom presentation, case-study review and hands-on training students will learn about how dangerous dirt can be to victims and rescuers. They will go over what a first due company can do when arriving on scene of these types of emergencies. Finally, students will learn what the expectations will be from technical rescue teams in support operations.</p>	
<b>Applicable NFPA Standard(s):</b>	
<b>Class Capacity:</b>	<b>Total Hours of Training:</b>

## SECTION III

<b>Applicant Signature:</b> <i>Eric Burghardt</i>	<b>Date:</b>
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## BFS USE ONLY

<b>Date Approved by MFFTC:</b>	<b>"Q" Course Number Assigned:</b>	<b>Date Course Catalog Updated:</b>
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# **Kalamazoo County Fire Chiefs Association**

## **TRENCH RESCUE AWARENESS: THE DANGERS OF DIRT**

A trench/excavation rescue is a very dangerous situation for everyone involved. First responders need to know what those dangers are before they respond to an emergency. This course is designed to inform responders, leaders, and industry professionals to the dangers of trench and excavation emergencies.

Through a combination of classroom presentation, case-study review and hands-on training students will learn about how dangerous dirt can be to victims and rescuers. They will go over what a first due company can do when arriving on scene of these types of emergencies. Finally, students will learn what the expectations will be from technical rescue teams in support operations.

### **Training Objectives**

- 1. Trench Terminology**
- 2. The Dangers of Dirt**
- 3. NFPA / MIOSHA / OSHA Review**
- 4. 1st Due Operations**
- 5. Support Operations**
- 6. Trench Incident Management**
- 7. Trench Rescue Teams**
  - a. Sheet**
  - b. Shore**
  - c. Entry**

**Class Cost: \$50/student**

**Class Size: 30**

**Class Location: TBD**

**Class Date: TBD**

**Class Time: TBD**

**Contact: Course Coordinator Eric Burghardt; [eburghardt@oshtemo.org](mailto:eburghardt@oshtemo.org)**

**Smoke Course Code:**



# "Q" COURSE APPLICATION

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, PO Box 30700, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)  
Phone: 517-241-8847

**FMQ21-005**

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

## SECTION I

Name of Applicant: Dave Van Holstyn	Pin Number: 604768	Date: <del>10/03/2020</del> 12/15/2020	
Host Fire Department: Covert Township Fire Department	County: Van Buren		
Applicant Street Address: 45700 Port St.			
City: Plymouth	State: Michigan	Zip Code: 49544	Email: <a href="mailto:TruckFF@yahoo.com">TruckFF@yahoo.com</a>
Applicant Phone Number: 616 299-5772	Alternate Number: 734 392-5123		

## SECTION II

Seminar/Course Name: Michigan Urban Search & Rescue (MUSAR) Awareness/Operations Level Rope Rescue	
Instructor(s): Approved MUSAR Instructors, Dave Van Holstyn, Program Manager	Instructor Email/URL: <a href="mailto:TruckFF@yahoo.com">TruckFF@yahoo.com</a>
Instructor Phone Number: 616 299-5772	Flyer Attached: <input type="checkbox"/> <a href="http://musartf.org/?page_id=41">http://musartf.org/?page_id=41</a>
Course Description: (Include course syllabus and detailed course expenses-you may attach additional pages if needed)	

SEE ATTACHED

Applicable NFPA Standard(s): 1670 - 1006 - 1983

Class Capacity: 18

Total Hours of Training: 40

## SECTION III

Applicant Signature:



Date:

12/15/20

BFS USE ONLY

Date Approved by MFFTC:

"Q" Course Number Assigned

Date Course Catalog Updated

## MUSAR Rope Rescue Awareness / Operations

This 40-hour program exceeds the capabilities required in NFPA 1670 for an Operations level team.

This is a hands-on, practical course specifically designed to address the needs of fire and rescue agencies which may be called upon to perform rope based rescues from above or below grade including the rescue of workers suspended on fall arrest, as well as in support of operations at confined space, trench and structural collapse rescue incidents.

While the emphasis is on working as a team to complete the rescues, there are numerous individual skills are critical to that success. Throughout the program there is a strong emphasis on basic skills and safety. These fundamentals are important, not just for class, but as a foundation for all future rope rescue training. Each of the techniques presented has been tested and proven; and some will be proven again as a part of the program, especially in the belay workshop. After successfully completing the course, participants are able to work safely at rope rescue incidents, operate the commonly used systems (lower, raise and belay) and be familiar with the techniques used for the typical rope rescue incidents.

### Course Content-

NFPA & OSHA Standards	Standards Operating Guidelines
Safety & Rope Rescue Hazards	PPE
Hardware	Software
Knots	Anchoring
Rappelling	Self-Rescue
Belays	Lowering Systems
Mechanical Advantages	Ladder Systems
Low Angle Litter Evolutions	Team-Based Pick-offs
Patient Packaging	Rescue Scenarios

### Course related costs-

Expenses associated with the program include instructor wages and applicable payroll costs, participant manuals and skills check lists and an equipment replacement fund. The costs for instructor travel, lodging and per diem varies with the location of the program. For safety reasons, when participants are "on-rope" or otherwise exposed to the potential for falls, the typical student-to-instructor ratio is 6:1.

The typical program, for 18 participants, will be \$12,000.00.



# "Q" COURSE APPLICATION

FMQ21-006

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, Fire Fighter Training Division  
2407 N. Grand River, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

### SECTION I

<b>Name of Applicant:</b> Jamal Mickles		<b>SMOKE PIN:</b> 550559	<b>Date:</b> 1-4-2021
<b>Host Fire Department:</b> Detroit Fire Department		<b>County:</b> Wayne	
<b>Applicant Street Address:</b> 1056 Alberta St.			
<b>City:</b> Ferndale	<b>State:</b> Mi	<b>Zip Code:</b> 48220	<b>Email:</b> micklesj7777@detroitmi.gov
<b>Applicant Phone Number:</b> 1-313-920-9129		<b>Alternate Number:</b> 1-313-237-2775	

### SECTION II

<b>Seminar/Course Name:</b> O2X Human Performance for Tactical Athletes	
<b>Instructor(s):</b> Eamonn Burke	<b>Instructor Phone Number:</b> 617.416.2195
Adam La Reau	617.416.2195
<b>Instructor Email/URL:</b> <a href="http://www.o2x.com">www.o2x.com</a>	<b>Flyer Attached:</b> <input checked="" type="checkbox"/>

**Course Description:** (Include course syllabus and detailed course expenses-you may attach additional pages if needed)

The O2X Human Performance program is designed by former US Navy SEALs to mitigate the occupational health risks that firefighters and other tactical athletes face including Cardiac Disease, Cancer, Orthopedic Injury, and Mental Health issues. To do this, a holistic program is taught centered around the five pillars of human performance which are Strength and Conditioning, Nutrition, Sleep, Stress Management, and Resilience for Post-Traumatic Stress. Tier 1 experts present on their specific discipline of Human Performance as subject matter experts throughout the course of instruction.

<b>Applicable NFPA Standard(s):</b> Meets and exceeds NFPA 1583 guidelines	
<b>Class Capacity:</b> 50	<b>Total Hours of Training:</b> 32

### SECTION III

<b>Applicant Signature:</b>	<b>Date:</b> 1-7-2021
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### BFS USE ONLY

<b>Date Approved by MFFTC:</b>	<b>"Q" Course Number Assigned:</b>	<b>Date Course Catalog Updated:</b>
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## **O2X Company Overview**

O2X Human Performance was founded in December of 2013 and currently provides comprehensive wellness services to employees from more than 100 federal, state, and local jurisdictions as well as educational institutions and private sector companies. O2X provides training, education, and resources to firefighters, law enforcement officers, city employees, federal workers, athletes, and private sector companies that increase job performance, support healthy lifestyles, and have been proven to reduce healthcare costs associated injuries and illnesses.

O2X Human Performance is a veteran owned small business (cage code: 7ZUM8) and as such serving others is a fundamental part of our vision and purpose. Founded by former Navy SEALs, the company mission has been clear from the start: to help others learn how to make small, incremental changes daily that lead to sustainable lifestyle improvements. The founders are joined by a team of U.S. Special Operations veterans, professional athletes, Olympians, firefighters, collegiate athletes, and more than 80 Human Performance experts from around the country.

## **O2X Company Information**

CGLM LLC (dba O2X Human Performance)  
28 New Driftway #5  
Scituate, MA 02066

CGLM LLC was incorporated on December 16, 2013 in Delaware.  
Cage code: 7ZUM8  
DUNS #: 080599878

## **O2X Human Performance Services**

O2X Human Performance has an extensive record of working to implement successful programs within large local public-sector agencies, both unionized and not.

For the past 5 years, we have worked on a variety of human performance initiatives with dozens of municipalities. This includes Boston Fire Department, with more than 1500 members, to implement comprehensive wellness program that has included education, training, screenings, resources, seminars, tracking and reporting, and remote support. This initiative targets not only the active duty firefighters, but also support and administrative staff, civilian fire department employees, and the families of BFD members. Outcomes of the program have included overwhelmingly positive anecdotal feedback for participants, an average NPS of 91, and definitive cost savings associated with a reduction in sick leave, workers comp claims, and backfill staffing to account for injury and illness absences.

O2X Human Performance has also implemented similar programs with other public sector agencies including Washington DC (2000 employees); Loudoun County, VA (700 employees); Prince George's County, MD (1000 employees); Broward County, FL (700 employees); Ft. Lauderdale, FL (400 employees); and the Federal Government. We have tremendous experience implementing effective wellness programs across large and diverse employee populations.

Multiple jurisdictions have received direct funding for O2X wellness programs through federal and local grants under the health and wellness heading. O2X has also been approved as a health and wellness program vendor with the DC Metropolitan Region's Council of Governments following an extensive vetting process.

#### Sustainment, Screenings, and Assessments

- One-Year access to the O2X Tactical Athlete Portal
- One-Year access and mentorship from Tier 1 Human Performance Specialists
- Individual O2X Human Performance online accounts
- Daily content with the O2X EAT SWEAT THRIVE methodology
- O2X integrated motion capture technology for mobility screening assessments
- Objectively and accurately measures the biomechanics and kinematics of tactical athletes
- Administer screenings with proprietary technology through a series of movements and exercises
- Movement patterns will identify joint imbalances and asymmetries in every individual
- Assessments will recognize and highlight predispositions to individual injuries
- O2X specialists will analyze results and provide comprehensive exercise guides to mitigate injuries
- Initiative will increase strength, stability, mobility, and balance for increased neuromuscular control
- Body Composition Analysis: Basal Metabolic Rate, Body Fat Percentages, Lean Muscle Mass, etc.
- Overall Human Performance Assessment/Profile for each employee (customized reports)
- Collective Human Performance Assessment/Profile for the full organization (customized reports)
- Each participant will receive a copy of the O2X book: *Human Performance for Tactical Athletes*

#### O2X Sustainment Services (TBD)

Tactical Athlete Portal: O2X Human Performance utilizes an online membership portal to provide our clients with access to resources that support our programs. We would use this same platform as the base for all enrollments of service members in the program. The Tactical Athlete Portal provides continued access to our subject matter experts and a robust amount of

HP content. All inquiries will be answered within 24- hours of submission. Inquiries made during normal business hours will typically be responded to within in the same business day.

Screenings and Assessments: As part of the program, O2X will screen and assess all participants with mobility screenings, body composition analysis, human performance assessments and physical fitness tests. All of the screenings and assessments will include individual reports with customized plans for improvement. We will also deliver the overall status team reports to the leadership.

On site O2X Human Performance Specialists: (Job Description attached) On-site O2X Human Performance specialists are highly trained and educated professionals, but with one key difference from those found at typical programs. Our specialists operate with the full support of a national network of more than 80 experts; masters of nutrition, conditioning, sleep, mindfulness, stress, mental performance, and resilience; all following the same O2X EAT SWEAT THRIVE framework. The on-site O2X specialist will serve as a conduit to this expansive resource and provide guidance and support based on individualized employee needs.

## **O2X Workshop Schedules**

### **O2X Workshop (4-Day) - Standard**

- The 4-day workshop is the standard O2X delivery method for the complete EAT SWEAT THRIVE curriculum. It allows participants to be fully immersed in O2X for 4 full days of content with proven results.

### **O2X Human Performance EAT SWEAT THRIVE Series**

- O2X Human Performance to customize a series of training and assessments focused on maximizing performance through our EAT SWEAT THRIVE methodology
- Series to be instructed in training blocks in order to meet the demands of the organization's schedule
- Tier 1 Specialists providing practical and classroom education on Conditioning, Nutrition, Sleep, Stress Mitigation, and Resilience (The O2X EAT SWEAT THRIVE methodology)
- Curriculum based on a combination of physical and mental training as it pertains to maximizing tactical performance
- O2X will handle all gear, logistics, personnel, set up/break down and event management
- All course materials including Syllabus, Course Manual, and Content, etc.
- Sustainment partnerships with access to the team of O2X Human Performance specialists and the Tactical Athlete Portal

## O2X Human Performance Workshop Schedule – Standard 4-Day

The 4-day workshop is O2X’s standard delivery method for the complete EAT SWEAT THRIVE curriculum. It allows participants to be fully immersed in O2X for 4 full days of content with proven results.

Time	Day 1	Day 2	Day 3	Day 4
7:30	Check In	Check In	Check In	Check In
7:45 – 10:00	Intro to O2X & SWEAT	Injury Causation & Prevention	Yoga Meditation & Breathing	SWEAT & Sleep Performance
10:00 – 12:00	Human Performance Philosophy & Development	Prepare Rehabilitation SWEAT & Recover	Stress Factors and High Risk Jobs & Behavioral Health	Sleep Performance & Nutrition Basics
12:00 – 13:00	Lunch	Lunch	Lunch	Lunch
13:00 – 14:00	SWEAT Movement + Lifting Foundations	Mental Readiness + Performance & Optimizing Mindset	Footwear Selection & Injury Prevention	Performance Nutrition & Meal Planning
14:10 – 15:00	SWEAT Programming Practice	Self-Regulation & Peak Performance	Gait Analysis & Movement Training	Meal Planning Cont.
15:00 – 16:00	Programming Practice cont.	Peak Performance cont.	Movement + Mobility Training cont.	GRADUATION
16:00	Q&A	Q&A	Q&A	



**OPTIMIZE TO THE X**





## WHAT OTHERS ARE SAYING ABOUT O2X

***“Strong bodies make strong minds - but more than that, this book illustrates that the two are essential in the creation of high-functioning, operationally-savvy teams.”***

**General Stanley McChrystal (Ret)**

**Retired four-star general, former commander of JSOC and ISAF**

***“Members have consistently stated that ‘this is the best training that we have ever had.’ The O2X team also put on a Resilience Seminar with world class speakers who engaged the crowd from beginning to end. Difficult subjects such as depression, suicide, addiction and PTSD were covered. It was an overwhelming success with multiple people requesting to follow up with support groups after the seminar.”***

**Gregory J. Mackin**

**Deputy Fire Chief, Boston Fire Department**

***“The O2X program was by far the most well organized and well presented program that I have attended...This program is going to change the face of the emergency services in our country.”***

**Workshop Participant**

**Captain, Law Enforcement**

***“Most programs focus so heavy on the workout portion of health and wellness. O2X truly educates the student that health and wellness encompass every aspect of your life and not just your workout routine. The amount of information presented to the students makes it easy to start with the littlest change and build from there to improve your lifestyle and health (both mental and physical).”***

**Loudoun County Local 3756 President**



## THE O2X HUMAN PERFORMANCE CO-FOUNDERS

**ADAM LA REAU**



Prior to O2X, Adam was a former Lieutenant Commander in the United States Navy who began his military career as a Midshipman at the United States Merchant Marine Academy (USMMA) in Kings Point, New York. After graduating and earning his commission in 2002, he became the first U.S. Merchant Marine Academy Midshipman to report directly to--and successfully complete--the U.S. Navy's Basic Underwater Demolition/SEAL (BUD/S) training to earn the title of U.S. Navy SEAL. His efforts helped develop a pipeline for future U.S. Merchant Marine Academy Midshipman to pursue goals of serving their country as U.S. Navy SEALs.

After successfully completing BUD/S and advanced training, he spent his career with Navy SEAL Team Four, Eight and Naval Special Warfare Development Group. Over the next decade, Adam conducted seven combat deployments in support of Operation Iraqi Freedom, Operation Enduring Freedom, and other contingency operations around the globe.

Having left active duty in August 2013, Adam attended the Harvard Kennedy School of Government and received a Master of Public Administration. Following his passions, he created a non-profit called 'One Summit' to help build resilience in children with cancer that has helped hundreds of children, spread to three major cities, and results are being utilized in post-traumatic growth studies.

**PAUL MCCULLOUGH**



Prior to creating O2X, Paul served eleven years in the U.S. military as a Navy SEAL. He spent his career with SEAL Team Eight and Naval Special Warfare Development Group. Throughout his service, Paul conducted numerous combat deployments in support of Operation Iraqi Freedom, Operation Enduring Freedom and other contingency operations around the globe. Paul left the Navy as a Chief Petty Officer and his highest awards include a Silver Star Medal, 2 Bronze Star Medals with Valor, and 2 Joint Service Commendation Medals with Valor.

After leaving the Navy in 2012, Paul was hired at Eaton Vance Investment Managers where he worked in the Institutional sales team. He left Eaton Vance in 2014 to follow his passion for entrepreneurship and Human Performance. He has a Bachelor of Arts in Marketing from American Military University and resides in New England with his wife and four kids.

**GABRIEL GOMEZ**



Gabriel is a former Lieutenant in the United States Navy who began his military career as a Midshipman at the United States Naval Academy (USNA). Gabriel played Varsity Tennis while at USNA and graduated with Merit. He became a Navy Pilot and a Navy SEAL officer, becoming the second person in the U.S. Navy to achieve both. He spent his career with SEAL Team Four.

After leaving active duty, Gabriel attended Harvard Business School (HBS) and received a Master of Business Administration. After HBS, he worked at Bowles Hollowell Conner in Mergers & Acquisitions, Summit Partners, and spent the last 9 years at Advent International in private equity. In 2013, he ran for U.S. Senate seat vacated by John Kerry. After winning the Republican Primary nomination in the special election, he lost the general election. Gabriel then followed his passion and co-founded and runs O2X.

## WHAT IS O2X? “OPTIMIZE TO THE X”

With decades of combined service to our country as members of the Special Operations community, O2X began with a shared desire to continue to serve others. The company name, O2X, is a direct reflection of its mission: “Optimize to the X.” In the military, the X always represented our target. And our target was not always the same, nor was it always simple or straightforward. We continuously sought a competitive edge over our enemy and consistently looked for the most optimal way to hit our target.



For tactical athletes and other high performing individuals or organizations, the X may change as well. Whether their target is to reduce cardiac disease, cancer rates, suicides, orthopedic injuries, post traumatic stress or simply strengthen culture or performance, O2X helps individuals and organizations implement the most optimal and effective strategy. We see great value in being able to adjust and tailor the delivery of our curriculum to create customized performance solutions for each of our clients.

The O2X team is comprised of U.S. Special Operations veterans, Olympic, professional, and Division I collegiate athletes, and a continually growing network of human performance specialists who are subject matter experts and leaders in their respective fields.

At our core, we understand that striving for excellence takes work and that maximizing human performance is about making consistent improvements daily. There is no quick fix. We know that following a science-backed, comprehensive human performance program works, and we stand by it. What's your X?

 **EXPEDITIONARY**

 **CUSTOMIZED**

 **SCALABLE**

# INTRODUCTION TO O2X HUMAN PERFORMANCE

## OUR MISSION

The world leader in human performance

## WHAT IS HUMAN PERFORMANCE?

A multi-disciplinary approach to optimizing mental and physical health, increasing productivity, and maximizing performance in all spheres of life.

## WHAT WE DO

Provide a comprehensive approach to training and education that meets the unique demands of tactical athletes and elite organizations. The science-backed human performance program is delivered through in-person trainings, virtual resources, assessments, and analysis.

## WHAT IS A TACTICAL ATHLETE?

A tactical athlete is someone who faces heightened levels of job-related mental and physical stress daily. A tactical athlete is required to perform physically, consistently face life-or-death decisions, deal with extreme trauma, and do it all in unpredictable environments. Tactical athletes are the firefighters, law enforcement officers, military personnel, and first responders dedicated to keeping our communities safe.

## WHO WE ARE

The O2X team is comprised of 150(+) U.S. Special Operations veterans, Olympic, professional, and Division I collegiate athletes, and a continually growing network of human performance specialists who are subject matter experts and leaders in their respective fields.



**“THE ENTHUSIASM, KNOWLEDGE, AND DEDICATION OF THE STAFF AND INSTRUCTORS FROM O2X IS SECOND TO NONE. THIS PROGRAM IS GOING TO CHANGE THE FACE OF THE EMERGENCY SERVICES IN OUR COUNTRY.”** *(O2X Participant)*

# O2X'S INTEGRATED APPROACH

We provide an integrated, customized training and education program designed to meet the unique demands of your industry. We go where you go. Our curriculum focuses on teaching you the skills to get 1% better every day. Here's a sample of how it works.



**“WE GO WHERE YOU GO.”**

# HUMAN PERFORMANCE TRAININGS

## **CUSTOMIZED TO MEET YOUR TEAM'S NEEDS**

### **CORE CURRICULUM**

This is our cornerstone product. It is the basis for everything we do and sets the tone for all of our other efforts. Our approach to Human Performance begins with our EAT SWEAT THRIVE curriculum, which was designed to make a lasting impact on the health, safety, and performance of tactical athletes and elite organizations. The curriculum is science-backed and taught by leading experts in each field.

### **WARRIOR CULTURE**

The program offers a systematic approach to developing a culture of excellence and forging a warrior spirit. The sessions are designed to help teams develop strong foundations of leadership and accountability. Based on foundations of leadership and key traits of high performing teams, O2X provides concrete takeaways and clear action plans for individuals and teams to optimize to the X.

### **RESILIENCE & BEHAVIORAL HEALTH**

The resilience workshops focus specifically on behavioral health, mental performance, and handling adversity. These workshop provide a space for individuals and teams to discuss resilience, understand the impact of stress and post traumatic stress, cope with trauma, learn tools for self-regulation, and forge a warrior spirit. The workshops include training and education on PTS/D, overcoming adversity, transitioning from work to home life, and building strong support networks.



# SUSTAINMENT PRODUCTS

## ASSESSMENTS, SCREENINGS, & OTHER OFFERINGS

### HUMAN PERFORMANCE ASSESSMENT(S)

This is our cornerstone assessment and provides the baseline for all that we do. It is the foundation of our belief that you can get 1% better every day. Using a proprietary algorithm, O2X developed a questionnaire that determines a baseline analysis of human performance for each participant. The personalized report highlights areas of strength, as well as showing where individuals can improve within their daily routines.

We are able to create department- and team-wide reports for organization leadership.

### INJURY PREVENTION SCREENING & BODY COMPOSITION

Using cutting-edge technology, we provide movement screening and body composition analysis for teams and organizations. These screenings utilize 3D motion capture technology to identify areas in the body that may be more susceptible to injury. With this information, we are able to create personalized plans to build a strong base of functional movement. These screenings help identify team-wide trends so O2X can help implement the proper prehabilitation and injury prevention.

### PHYSICAL TESTING & ANALYSIS

The O2X team offers the option to staff and administer our proprietary Physical Fitness Test. The purpose of this is to provide a department-wide profile of physical performance capacities. This includes a number of exercises that allows O2X to determine individual and team physical performance level, and recommend human performance training programs based on the results.

### VIRTUAL OFFERINGS

O2X provides a variety of virtual offerings and resources including healthy recipes, physical conditioning programs, mental performance tools, and educational content in each category of human performance. This content is distributed through our Portal, quarterly magazine, and a continuously growing list of digital offerings that ensure access to updates on the latest science and research in human performance and practical tools clients can implement into their daily lives.

### ON-SITE SPECIALIST STAFFING

The O2X on-site specialist staffing program is designed for agencies looking to staff a full-time human performance position. This allows departments to let O2X control the screening, hiring, and employment of a fully vetted and certified, elite O2X Human Performance Specialist to improve the mental, physical, and emotional health of your members. O2X custom tailors the position to your organizational needs by providing a world class professional who specializes in one or more areas of performance and has complete access to the O2X network of specialists for reach-back support.

The O2X On-Site Specialist program allows organizations to conduct member testing and evaluation and integrate individual needs with department performance enhancement programs.

# EXAMPLE: CORE CURRICULUM WORKSHOPS

**O2X Team Member**  
*Introduction to Human Performance*

**Taught by O2X Specialists**  
**CSCS, DPT, AT**  
*Science of Strength & Conditioning*

**INTRODUCTION TO THE O2X PHILOSOPHY & HUMAN PERFORMANCE ASSESSMENT**

**O2X SWEAT: CONDITIONING FOR PERFORMANCE, FOUNDATIONS OF MOVEMENT & LIFTING, PROGRAMMING IN PRACTICE**

**Taught by O2X Specialists**  
**CSCS, DPT, AT**  
*Science of Injury Prevention*

**Taught by O2X Specialists**  
**Ph.D., M.Ed.**  
*Stress Management & Mental Readiness*

**O2X SWEAT: PREHABILITATION, INJURY PREVENTION, & RECOVERY FOR CAREER LONGEVITY**

**O2X THRIVE: OPTIMIZING MENTAL PERFORMANCE UNDER PRESSURE**

**Taught by O2X Specialists**  
**Yoga, Meditation**  
*Yoga & Meditation for Tactical Athletes*

**Taught by O2X Specialists**  
**Ph.D., M.Ed.**  
*Resilience & Stress Management*

**Taught by O2X Specialists**  
**CSCS, DPT, AT**  
*Movement, Mobility, & Footwear Selection*

**O2X THRIVE: BREATHING, YOGA, & iREST FOR TACTICAL ATHLETE PERFORMANCE**

**O2X THRIVE: STRESS FACTORS, BEHAVIORAL HEALTH, & BUILDING RESILIENCE IN HIGH RISK JOBS**

**O2X SWEAT: GAIT ANALYSIS, FOOTWEAR SELECTION, & MOVEMENT TRAINING FOR INJURY PREVENTION**

**Taught by O2X Specialists**  
**Ph.D., M.Ed.**  
*Sleep Science & Practical Application*

**Taught by O2X Specialists**  
**Ph.D., MSc, Nutritionists**  
*Science of Performance Nutrition*

**O2X THRIVE: IMPACT OF SLEEP ON PERFORMANCE & HOW TO CREATE HEALTHY SLEEP HABITS**

**O2X EAT: NUTRITION FOR PERFORMANCE, MEAL PLANNING, AND DAILY IMPLEMENTATION OF HEALTHY HABITS FOR TEAMS & INDIVIDUALS**

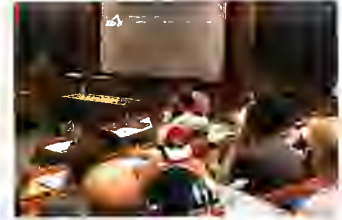




# EXAMPLE: WARRIOR CULTURE WORKSHOPS

*Beginning with pre-workshop assessments, O2X will work with you to customize a program. Starting with foundational elements of human performance & leadership, each subsequent session will be tailored to meet the specific performance needs of your organization. Sessions include:*

<p><b>O2X Team Member</b> <i>Introduction to Human Performance</i></p>	<p><b>INTRODUCTION TO THE O2X PHILOSOPHY &amp; HUMAN PERFORMANCE ASSESSMENT</b></p>
<p><b>Led by O2X Team Members</b> <i>Customized Team Building Activities</i></p>	<p><b>TEAM BUILDING ACTIVITIES CUSTOMIZED TO MEET THE NEEDS OF YOUR ORGANIZATION</b></p>
<p><b>Taught by O2X Team Member Seasoned Special Operators</b> <i>Lessons in Leadership of Self &amp; Teams</i></p>	<p><b>DEVELOPING PERSONAL AND TEAM ACCOUNTABILITY &amp; COMMUNICATION</b></p>
<p><b>Taught by O2X Specialists Ph.D., M.Ed.</b> <i>Stress Management &amp; Mental Readiness</i></p>	<p><b>OPTIMIZING MENTAL PERFORMANCE &amp; CRITICAL DECISION MAKING UNDER PRESSURE</b></p>
<p><b>Taught by O2X Team Member Seasoned Special Operators</b> <i>Lessons in Leadership of Self &amp; Teams</i></p>	<p><b>DEFINING CORE VALUES &amp; CREATING ACTION PLANS FOR CULTURE CHANGE</b></p>
<p><b>Taught by O2X Team Member</b> <i>Lessons from High Performing Teams</i></p>	<p><b>CONDUCTING AFTER ACTION REVIEWS &amp; EFFECTIVE POST-INCIDENT DEBRIEFS</b></p>
<p><b>Taught by O2X Team Member</b> <i>Lessons from High Performing Teams</i></p>	<p><b>FORGING A WARRIOR SPIRIT AND CULTURE</b></p>



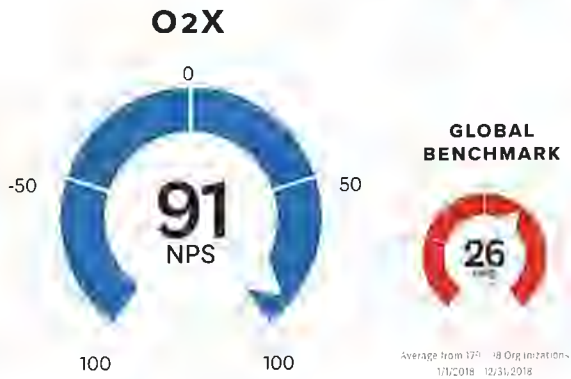
# EXAMPLE: RESILIENCE & BEHAVIORAL HEALTH WORKSHOPS

<p><b>O2X Team Member</b> <i>Introduction to Human Performance</i></p>	<p><b>INTRODUCTION TO THE O2X PHILOSOPHY &amp; HUMAN PERFORMANCE ASSESSMENT</b></p>
<p><b>Taught by O2X Team Member Seasoned Special Operators</b> <i>Lessons in Leadership of Self &amp; Teams</i></p>	<p><b>CONDUCTING AFTER ACTION REVIEWS &amp; EFFECTIVE POST-INCIDENT DEBRIEFS TO IMPROVE BEHAVIORAL HEALTH OUTCOMES</b></p>
<p><b>Taught by O2X Team Member Seasoned Special Operators</b> <i>Lessons in Leadership of Self &amp; Teams</i></p>	<p><b>SUICIDE PREVENTION THROUGH CREATING A CULTURE OF SUPPORT IN HIGH RISK ENVIRONMENTS</b></p>
<p><b>Taught by O2X Specialists Ph.D., M.Ed.</b> <i>Stress Management &amp; Resilience</i></p>	<p><b>BUILDING RESILIENCE AND MANAGING STRESS FACTORS IN HIGH RISK JOBS</b></p>
<p><b>Taught by O2X Specialists</b> <i>Personal Stories of Resilience</i></p>	<p><b>FORGING A WARRIOR SPIRIT TO COME BACK STRONGER AFTER ADVERSITY</b></p>
<p><b>Taught by O2X Specialists Ph.D., M.Ed.</b> <i>Resilience &amp; Stress Management</i></p>	<p><b>IDENTIFYING AND EFFECTIVELY HANDLING SIGNS AND SYMPTOMS OF PTS/D</b></p>
<p><b>Taught by O2X Specialists Ph.D., M.Ed.</b> <i>Resilience &amp; Stress Management</i></p>	<p><b>MINDFULNESS AND TACTICAL BREATHING TO MANAGE DIFFICULT TRANSITIONS UNDER STRESS</b></p>
<p><b>Taught by O2X Specialists Ph.D., M.Ed.</b> <i>Sleep Science &amp; Practical Application</i></p>	<p><b>IMPACT OF SLEEP ON PERFORMANCE &amp; CREATING SLEEP HABITS TO IMPROVE BEHAVIORAL HEALTH OUTCOMES</b></p>



# O2X HUMAN PERFORMANCE STATISTICS

## A SNAPSHOT OF 2018-2019



### 2018 NPS SCORE: 91

*Global Benchmark Score: 26 (179,000+ organizations)*

Calculated by asking the question, "How likely is it that you would recommend O2X Human Performance to a friend or colleague?"

*Net Promoter Score is a key metric of success. We place tremendous value on feedback. Our curriculum gets better with each engagement as a direct result of input from workshop participants.*

### THE STATISTICS

**6000+**  
*received access to injury risk screenings*

**5000+**  
*completed the O2X Human Performance Assessment*

**500+**  
*departments and organizations nationwide*

**100%**  
*say O2X could make a positive difference in the overall health of their unit*



# HUMAN PERFORMANCE FOR TACTICAL ATHLETES

## THE FIRST COMPREHENSIVE GUIDE TO HUMAN PERFORMANCE

*Learn how to get 1% better every day*

*This book is a powerful blend of science and education paired with real-world experience and written through the tactical athlete lens.*

*Each chapter offers the tools required to live a happier, healthier life and maximize performance in any arena.*

O2X's proven *EAT SWEAT THRIVE* curriculum delivered through:

- Cutting-edge science and research
- Personal stories of performance and resilience
- Hundreds of images
- Concrete ways to get 1% better every day



*“Strong bodies make strong minds - but more than that, this book illustrates that the two are essential in the creation of high-functioning, operationally-savvy teams.”*

General Stanley McChrystal (Ret)

Retired four-star general, former commander of JSOC and ISAF

*“O2X is our secret weapon. Their program is developing elite competitors on and off the ice. This book will make you better – whatever your arena.”*

Ted Donato

Head Coach Harvard Men's Ice Hockey, former Boston Bruin, Olympian



*“In a word, outstanding. In two words, life changing. Excellence is written into every page.”*

James Kerr

Author of the global best-seller: *Legacy*, and high performance consultant

**O2X IMPACT & CASE STUDIES**

# O2X IMPACT: MAARNG & U.S. DEPARTMENT OF STATE

## O2X PARTNERS WITH MAARNG: Reading, Cape Cod, & Springfield, MA, 10-12 January 2020

**Who:** Three teams of O2X Specialists and 330+ MAARNG Service Members (SM) at three separate locations in MA.

**What:** Targeted effort to provide custom education and training through an O2X-led HP pipeline consisting of body composition, Injury Vulnerability Assessments, and physical therapy consultations to designated Service Members.

Each individual receives: movement screening, body composition analysis, and personal consultation with an O2X Specialist.

**When:** January 10-12, 2020

**Why:** MAARNG has partnered with O2X to provide specialized tactical performance education and training in a holistic approach to improving health of force. Main objectives are to increase combat readiness, pass the ACFT, and meet height/weight/tape requirements while improving the whole wellness of the SM through O2X's EAT SWEAT THRIVE Methodology.



### Each soldier receives:

- Personalized dashboard & results
- Tailored injury prevention programs
- Access to the O2X Portal including:**
  - 24/7 direct access to specialists
  - Over 100 recipes
  - ACFT preparation programs
  - Education on mental wellness
  - Over 65 training programs



### One-on-one consultations:

- Doctor of Physical Therapy (DPT)
- Discussions on areas of concern
- Improvement program for ACFT
- Tailored Pre/Rehab plans
- Copy of the O2X book, *Human Performance for Tactical Athletes*

### Impact:

- **330+SMs trained, assessed, and on-boarded by O2X human performance specialists at 3 locations across the state.**
- **347 total body compositions and 339 injury risk screenings completed.** More than 50% of the drilling force in attendance at the PHA.
- O2X's involvement demonstrated **expeditionary accessibility and responsive support** in all aspects of health and wellness. Designated SMs will attend didactic workshops this spring and summer, have access to virtual services, and engage with O2X experts at follow-up visits throughout the year. O2X will continue to support and facilitate MAARNG efforts to promote health and wellness.

## O2X PARTNERS WITH THE U.S. DEPARTMENT OF STATE: Various Locations, 2018 - Present

**Who:** O2X Human Performance (HP) experts work with various groups within U.S. Department of State to deliver initial performance assessments, in-person education, and on-going 24/7 access to resources via the O2X Portal

**What:** Targeted effort to provide custom education through in-person workshops, body composition and injury vulnerability analysis, quarterly follow ups, and annual refresher courses.

Each cohort includes: 4-day workshop, quarterly trainings, screenings, and a 2-day refresher course

**Why:** Agencies within the U.S. Department of State partner with O2X to provide an integrated approach to improving human performance and overall health of the force. Main objectives are to improve mental readiness, create healthy habits, meet physical job requirements while increasing career longevity and strengthening the overall wellness of members through O2X's EAT SWEAT THRIVE Methodology.

### Partnership Onboarding Timeline:



Note: each engagement includes a human performance assessment, dietary recall, and/or body composition and injury vulnerability analysis. The sessions are tailored to meet the unique demands of each team or organization as determined through collaboration between leadership & O2X staff

### Impact:

- **By February of 2020, five cohorts** will have begun their work with O2X. The positive impact of the program has led to expansion of the O2X program
- Collectively they have **completed over 40 educational sessions** led by O2X specialists
- **O2X has gathered 3,885 unique data points** through body composition analysis of individuals.
- O2X's involvement demonstrated **"Tier 1" expeditionary accessibility and responsive support** in all aspects of health and wellness. O2X has been able **adapt training sessions and resources to meet the continually evolving demands of the organization.**
- O2X will continue to support and facilitate U.S. Department of State efforts to promote health and wellness and help **integrate the training into different sectors to create a comprehensive approach that reaches all personnel.**

# O2X IMPACT: BOSTON FIRE DEPARTMENT

## O2X PARTNERS WITH BOSTON FIRE DEPARTMENT: Boston, MA, 2015 - Present

**Who:** O2X Human Performance (HP) experts worked with Boston Fire Department to create a customized human performance program designed to target the cancer rates, cardiac incidents, injury risks, and behavioral health issues prevalent in the fire service. The goal was to integrate the O2X programming with the health and safety initiatives being developed and implemented by leadership within BFD.

**What:** Targeted effort to provide custom education through in-person workshops, body composition and injury vulnerability analysis annual refresher courses, ongoing access to virtual tools, and a full-time O2X specialist embedded within the department

**Why:** Firefighters face elevated cancer rates and cardiac incidents, increased risk of injuries, sleep disturbances, and chronic and acute stress that can lead to mental health issues like PTS/D. The O2X program is designed and tailored to help firefighters meet physical and mental job requirements while improving the overall wellness of individual members through O2X's EAT SWEAT THRIVE Methodology.



O2X arranges to provide every member of the department, including support staff, through customized individual screenings and analysis

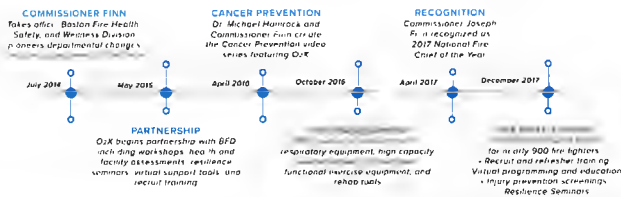


Each Academy begins with O2X training focused on injury risk reduction, performance under pressure, and promoting career longevity.

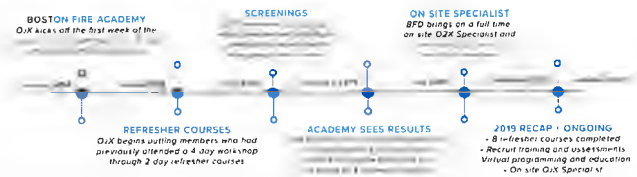


Refresher courses provide participants with training in resilience, goal setting, and tools to help build and strengthen the culture of high performance.

### 2014-2017



### 2018-Present:



### Significance:

- BFD has hosted **over 30 O2X Human Performance Workshops** for approximately **1,100 members** of the department
- O2X provides ongoing support through an **On-Site O2X Specialist** embedded full-time to **out-roll department-specific programming**
- Since 2015, members of BFD have completed **1,387 body composition screenings** facilitated by O2X staff
- On average, **90% of all BFD Academy recruits improved in all 5 key physical performance metrics** measured during Physical Testing following O2X's 16-week program. Across 2018/19 classes, **average body fat mass lost per individual was -4.6lbs and -2.17% body fat.**

**Contributed to overall cost savings of \$6.3 million, including \$4.7 million directly attributed to reduced injuries, paid time off, monthly sick calls, and a more resilient force.**

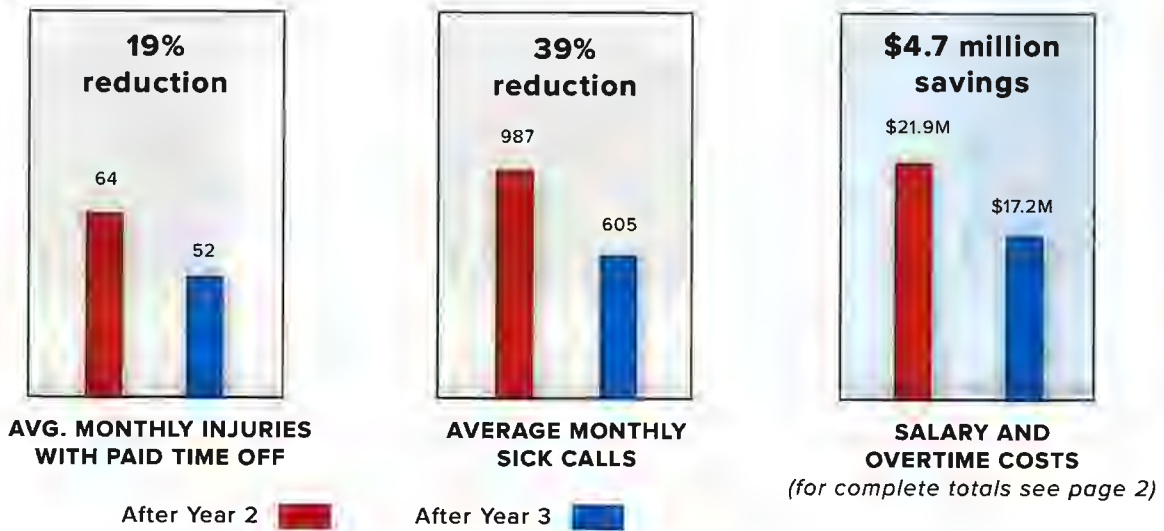
# O2X IMPACT: COST SAVINGS CASE STUDY

The following data reflects the results of three years of Boston Fire Department's comprehensive health, wellness, and safety initiative. Like all new programs, it took over a year for the effectiveness to be realized, thus the analysis begins after year two. Under the leadership of Commissioner Joseph Finn, Mayor Martin Walsh, and Local 718, BFD implemented major innovations and investments in state-of-the-art respiratory, safety, and fitness equipment, and a three year partnership with O2X Human Performance. This led to **\$6.3 million** in overall cost savings, including **\$4.7 million** directly attributed to reduced injuries, paid time off, monthly sick calls, and increased resilience of the department.

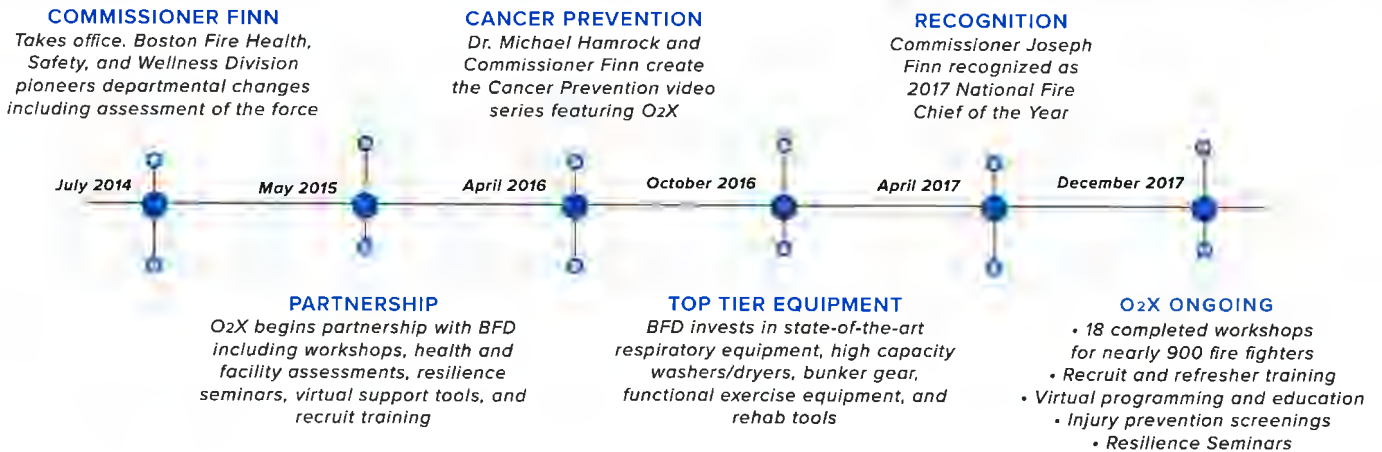
*All numeric and financial data provided by the Boston Fire Department and the City of Boston.*

## \$4.7 MILLION\* IN SALARY AND OVERTIME SAVINGS

\*\$6.3M when factoring in the cost of surgeries, disability, and administrative duties.  
For the complete totals see page 2



## 3-YEAR PROGRESS TIMELINE





# O2X IMPACT: COST SAVINGS CASE STUDY

While the Boston Fire Department saved \$4.7 million in salary and overtime expenses, the total economic impact is much higher when incorporating the reduction of surgeries, disability, and administrative duties. After factoring in these long-term costs, BFD realized **\$6.3 million** in savings since Joseph Finn was appointed Commissioner of the department.

*All numeric and financial data provided by the Boston Fire Department and the City of Boston.*

## \$6.3 MILLION\* IN OVERALL COST SAVINGS

\*includes replacement salaries, cost of surgeries and other medical expenses, disability, and administrative duties

FY 2016 COSTS

**\$35.1 million**

FY 2017 COSTS

**\$28.8 million**

	Salary and Overtime Costs	Cancer	Cardiac	Lung	Shoulder	Knee	Neck	Cervical	Administrative	Total
<b>2016</b>	<b>\$21.9M</b>	<b>\$3.0M</b>	<b>\$0.9M</b>	<b>\$1.3M</b>	<b>\$2.1M</b>	<b>\$1.8M</b>	<b>\$0.5M</b>	<b>\$0.6M</b>	<b>\$3.1M</b>	<b>\$35.1M</b>
<b>2017</b>	<b>\$17.2M</b>	<b>\$2.3M</b>	<b>\$0.6M</b>	<b>\$1.3M</b>	<b>\$2.0M</b>	<b>\$1.8M</b>	<b>\$0.4M</b>	<b>\$0.5M</b>	<b>\$2.8M</b>	<b>\$28.8M</b>

### PRESERVATION OF THE FORCE

The benefits of these initiatives go much farther than cost savings and the complete approach to health, safety, and performance has led to preservation of the force.

In addition to the millions of dollars saved in reduced injury costs, Boston Fire's commitment to health, safety, and wellness created a change in culture that rippled through the entire department of 1500+ firefighters, support personnel, and their families. This includes decreased recovery time and increased emphasis on mental performance.

Of note, the behavioral health initiative helped break barriers surrounding PTSD and mental health issues plaguing the fire service. This led to multiple cases of at-risk firefighters dealing with severe mental health challenges successfully by reaching out to the O2X team for assistance at critical moments. The impact of this is immeasurable.



**WHAT'S YOUR 1%?**



# "Q" COURSE APPLICATION

Michigan Department of Licensing & Regulatory Affairs  
Bureau of Fire Services, Fire Fighter Training Division  
2407 N. Grand River, Lansing, MI 48909  
Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

**FMQ21-007**

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

## SECTION I

<b>Name of Applicant:</b> Nathan Furton	<b>SMOKE PIN:</b> 744892	<b>Date:</b> 01/27/2021
<b>Host Fire Department:</b> Varying	<b>County:</b> Varying	
<b>Applicant Street Address:</b> 809 Terrace Ave		
<b>City:</b> Kingsford	<b>State:</b> MI	<b>Zip Code:</b> 49802
<b>Applicant Phone Number:</b> (906)290-0407		<b>Email:</b> furtonna@outlook.com
<b>Applicant Phone Number:</b> (906)290-0407		<b>Alternate Number:</b> (906)774-0622

## SECTION II

<b>Seminar/Course Name:</b> Surface Ice Rescue Technician	
<b>Instructor(s):</b> Midwest Fire Tactics and Training	<b>Instructor Phone Number:</b> (906)290-0407

<b>Instructor Email/URL:</b>	<b>Flyer Attached:</b> <input checked="" type="checkbox"/>
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<b>Course Description:</b> (Include course syllabus and detailed course expenses-you may attach additional pages if needed)
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<b>Applicable NFPA Standard(s):</b> NFPA 1006, NFPA1670 and NFPA 1983	
<b>Class Capacity:</b> 40	<b>Total Hours of Training:</b> 10

## SECTION III

<b>Applicant Signature:</b>	<b>Date:</b> 01/27/2021
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## BFS USE ONLY

<b>Date Approved by MFFTC:</b>	<b>"Q" Course Number Assigned:</b>	<b>Date Course Catalog Updated:</b>
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## **Class outline and objectives for ice rescue**

Objective 1: Overview of Ice Rescue.

Objective 2: Understanding and operating in the aquatic environment.

Objective 3: Establishing public safety guidelines through development of accurate public educational materials.

Objective 4: Treatment, handling, and understanding cold water victims.

Objective 5: The emotional element of rescues and how it affects the rescuer.

Objective 6: Equipment for ice rescue, needs versus wants, and understanding its limitations.

Objective 7: Pre-planning operations, mutual aid, and different levels of response.

Objective 8: Scene management, size up, and carrying out operational plans.

Objective 9: Application of classroom knowledge through in class final exam using video scenarios.

Objective 10: Field training and victim scenarios utilizing ice rescue equipment to conduct; self-rescues, throw rescues, craft rescues, and how to handle and remove multiple patients in the water.

Objective 11: Debriefing and establishing class goals for instituting appropriate SOP/SOG, equipment, and training at students' home departments.

## **Course expense:**

Class cost within the Upper Peninsula \$2,500 travel expenses included in price.

Class cost for locations within the Lower peninsula \$3,900 travel and lodging expenses included in price.



## "Q" COURSE APPLICATION

Michigan Department of Licensing & Regulatory Affairs  
 Bureau of Fire Services, Fire Fighter Training Division  
 2407 N. Grand River, Lansing, MI 48909  
 Email: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV)

To add a seminar/course to be listed in SMOKE submit this form to the following email address: [LARA-BFS-SMOKE@MICHIGAN.GOV](mailto:LARA-BFS-SMOKE@MICHIGAN.GOV) for review. The request will be reviewed and forwarded to the Michigan Fire Fighter Training Council (MFFTC) for curriculum review at the next scheduled MFFTC meeting (all requests must be made at least 15 days prior to the next regularly scheduled meeting).

### SECTION I

<b>Name of Applicant:</b> Nathan Furton		<b>SMOKE PIN:</b> 744892	<b>Date:</b> 01/27/2021
<b>Host Fire Department:</b> Varying			<b>County:</b> Varying
<b>Applicant Street Address:</b> 809 Terrace Ave			
<b>City:</b> Kingsford	<b>State:</b> MI	<b>Zip Code:</b> 49802	<b>Email:</b> furtonna@outlook.com
<b>Applicant Phone Number:</b> (906)290-0407		<b>Alternate Number:</b> (906)774-0622	

### SECTION II

<b>Seminar/Course Name:</b> The Search for THEM	
<b>Instructor(s):</b> Midwest Fire Tactics and Training	<b>Instructor Phone Number:</b> (906)290-0407

<b>Instructor Email/URL:</b>	<b>Flyer Attached:</b> <input checked="" type="checkbox"/>
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**Course Description:** (Include course syllabus and detailed course expenses-you may attach additional pages if needed)

Designed to help firefighters execute and perform fundamental and dynamic fireground search. Students will train on statistic based tactics from real world applications of search methodology and rescues.

**Applicable NFPA Standard(s):**  
NFPA 1700 NFPA 1410

<b>Class Capacity:</b> 20	<b>Total Hours of Training:</b> 16
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### SECTION III

<b>Applicant Signature:</b>	<b>Date:</b> 01/27/2021
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Objective 1: Overview of victim search and rescue with potential personal and crew limitations

Objective 2: Understanding and operating potential IDLH environment

Objective 3: Establishing safety guidelines through development of accurate public educational materials

Objective 4: Treatment, handling, and understanding of victim removal techniques

Objective 5: The emotional element of rescues and how it affects the rescuer

Objective 6: Equipment and PPE for quality, effective victim search

Objective 7: Pre-planning operations, realistic training and mutual aid mindset

Objective 8: Application of classroom knowledge through PowerPoint and lecture instruction using video and factual data driven scenarios

Objective 10: Field training and victim scenarios utilizing knowledge gained to conduct; self-rescues, victim rescues, equipment, and how to handle and remove multiple patients in structural firefighting operations

Objective 11: Debriefing and establishing class goals for instituting appropriate SOP/SOG, equipment, and training at student's home department

Class price is \$4,300 price includes all hand tools and equipment used in class, travel and lodging expenses. Price does not include the possibility of facility rental fees

Required PPE: full turnout gear (helmet, jacket, pants, boots, gloves and hood) with scba and spare bottle