Effective Fire Service Leadership: Point-to-Point Decision Making. The How and the Why!

Critical Decision Making

FDIC 2024

April 15, 2024

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- VA-TF2 US&R Task Force TFL
- Author, CDM (Fire Engineering Books & Videos)
- MPA, Old Dominion University
- Regular Contributor to *Fire Engineering*

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What is Effective Fire Service Leadership?

- Safe operations?
- Lives saved?
- Mentorship?
- Succession Planning?
- Followship?
- Property saved?
- Allowing for officer development?
- Ability for officers and firefighters to DECIDE?

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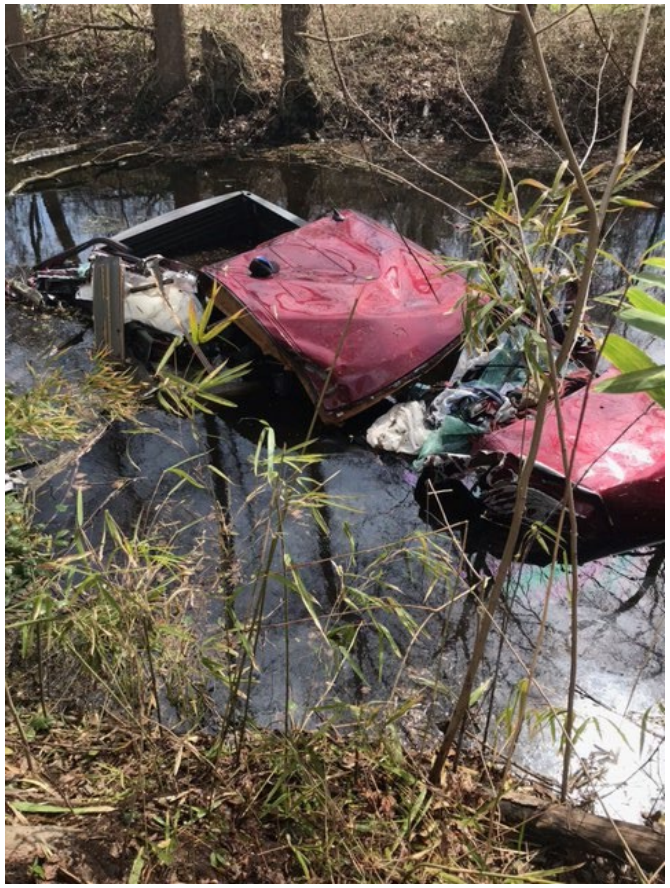
Point-to-Point Decision Making? How and Why?

- Critical Decision Making is an Art!
- It separates ordinary firefighters/officers from extraordinary firefighters/officers



How Effective Are We? What is the state of Today's Fire Service?

- Young?
- Experienced?
- Educated?
- Wise?
- Willing/Able?
- Multi-generational?
- Intimidated by Safety?

Discussion: What is hampering our ability to make Critical Decisions in Today's Fire Service?

- ***<u>New injects into the what we know!</u>***
  - Crew knowledge?
  - Experience of crews?
  - Wisdom of crews?
  - Willingness and ability of crews?
  - Generational gaps of crews?
  - Safety concerns based on "industry?"
  - Policies? Blue Card?

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What is CDM?

- 1) Critical- involving skillful judgement; of decisive importance with respect to outcome; of essential importance
- 2) Decision- the act of or the need for making up one's mind; something that is decided; a judgement; the act or *process* of deciding
- 3) Making- the means or cause of success or advancement; structure; capacity or potential

"Skillful judgement with decisive importance!"

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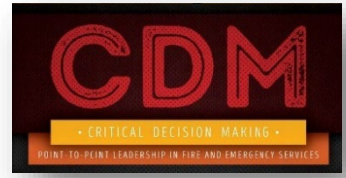

Effective Fire Service Leadership

- What is effective?
  - To be effective, we need a gauge of measure
- What exactly is leadership in the Fire Service?
  - What defines our abilities of performing as a leader?

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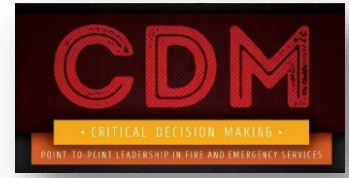

Point-to-Point Decision Making. The How and the Why!

- Objectives:
  - Review Effective Leadership
  - Identify the abilities of performing as a leader in the Fire Service
  - Discuss the phenomena of point-to-point decision making
  - How and Why is point-to-point leadership effective to identify effective leadership?
    - Measuring leadership through point-to-point decision making
    - Gauging leadership as a effective or not

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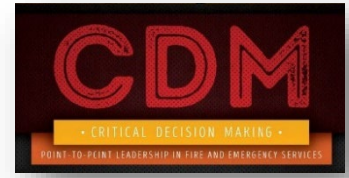

Safety as a limiter for CDM?

- **Are we, as decision makers, being “controlled” by the safety first culture?**
- **Who is making the decisions regarding your front seat, your office, your crew?**
- **What is today’s “shinny object” that defines the execution of fire, rescue, and EMS delivery?**
  - **Blue Card?**
  - **NFPA/IAFF/IAFC/VDFP?**

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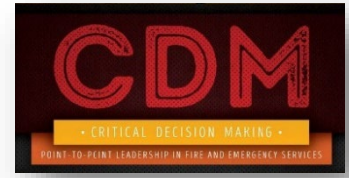

Basics of CDM:

- What characteristics define a great firefighter?
  - Leader
  - Experienced
  - Educated
  - Wise
  - Trainer
  - Thinker

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Discussion: Before we discuss effective leadership in the Fire Service: We must address Safety!

- **Can the desire to be “Safe” or “Safety” hinder decision making?**
- **Can “Safety” be considered a Consequence of Effective Leadership?**
- **Leadership During Critical Events/Incidents are:**
  - Unsafe by nature
  - Dynamic
  - Ever Changing
  - Have seen/unseen obstacles

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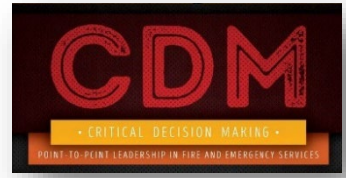

Discussion: Safety can be considered a Consequence of Effective Leadership: Leadership During Critical Events

- **Safety and Consequence in the same phrase?**
  - What is the consequence of being safe?
  - Can you be too safe and still complete or meet the mission?
- **Leadership during a Critical Event**
  - How can one lead when action and reaction is required?

So, how can safety be a consequence of leadership?

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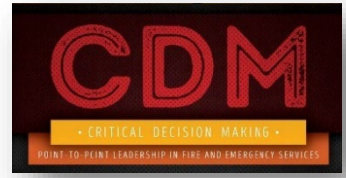
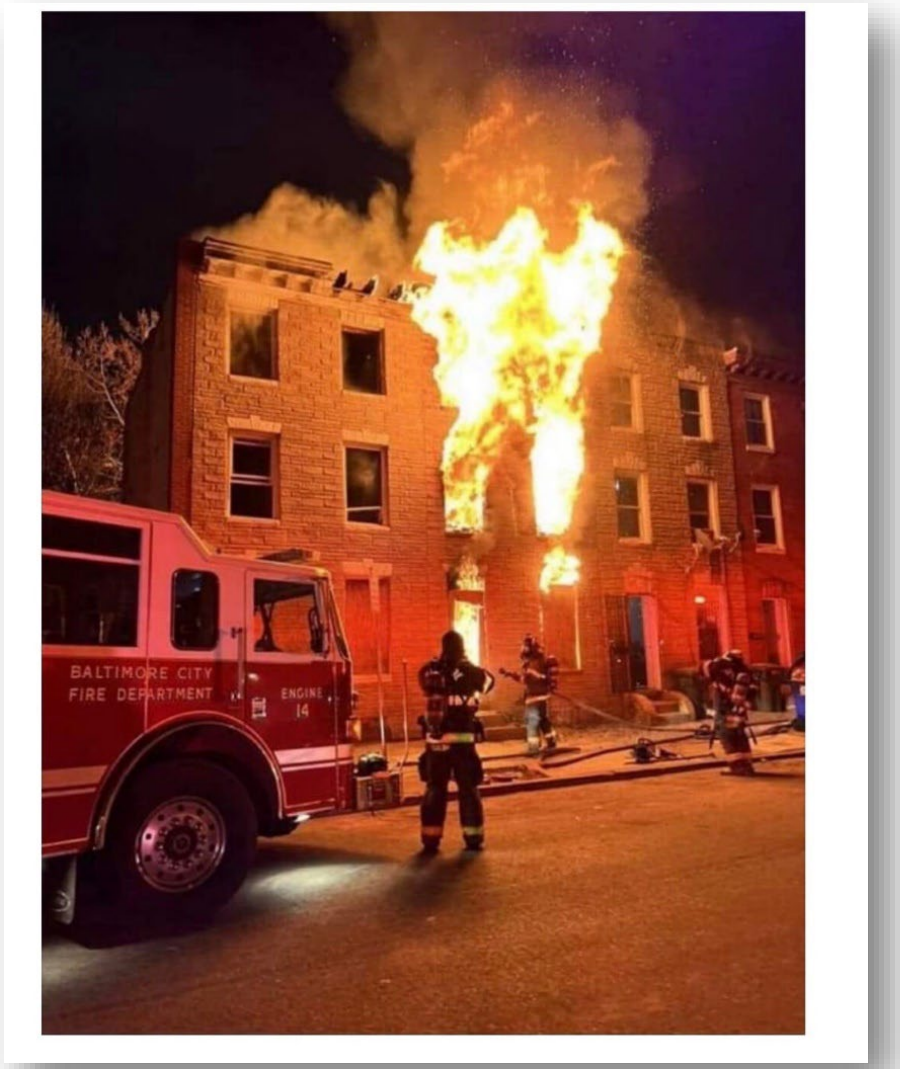
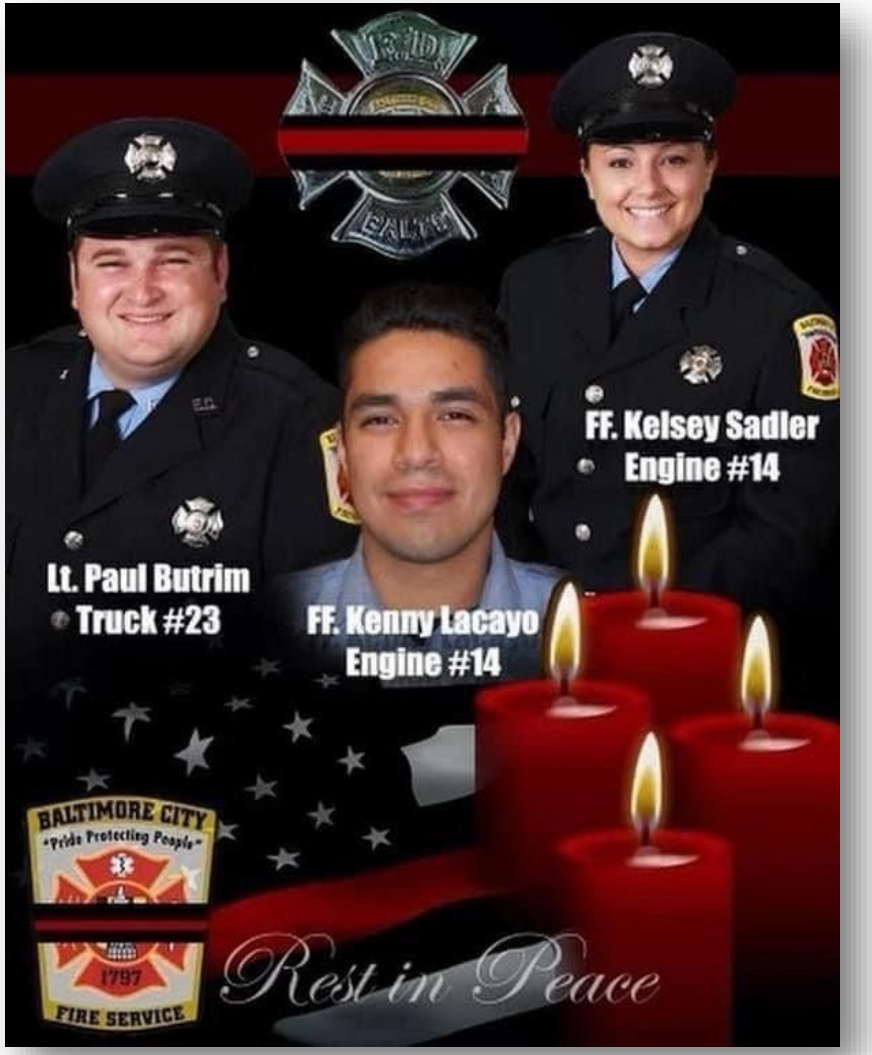


Case Study: BCFD: “Its our Culture.” BCFD’s Scott Lake





Case Study: NIOSH LODD: F2021-08

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Career Probationary Firefighter Dies During SCBA Confidence Training at Fire Academy – New York

Revised on December 16, 2022 to update Recommendation #8.

Executive Summary

Tunnel Prop
(Photo by NIOSH)

On March 12, 2021, a 21-year-old career probationary firefighter (PF) died nine days after a medical event during a training exercise. The PF was maneuvering through a self-contained breathing apparatus (SCBA) course training prop when he experienced a medical emergency and lost consciousness. The incident occurred while attending an eleven-week firefighter training academy. Week three of the curriculum is focused on firefighter survival and SCBA confidence training. At the end of the week, confidence in these skills is evaluated by completing a maze containing various obstacles while wearing firefighter personal protective equipment (PPE), and SCBA with a blackout cover over the facepiece. The blackout cover simulates zero visibility conditions that may be present during live fire encounters. On March 3, 2021, after two days of physically strenuous training, the PF spent the morning shift practicing individual obstacles to prepare for the maze. These obstacles included two window bail-out props, two stud-wall props to simulate stud channel escapes, and a 24-inch by 20-foot smooth bore plastic culvert tube with an 18-inch tube of the same material inserted. The 18-inch tube simulates a diminishing clearance profile within the 24-inch space. The PF reportedly struggled maneuvering through this prop during his morning practice when he had to doff and then don his SCBA pack while moving through the culvert tubes and the diminishing clearance profile. Once completed, the PF went for lunch. Recruit interviews reveal varying reports of the PF appearing nervous, pale, sweaty and cramping at different times during the late morning and while at lunch. Some reported that the PF had vomited during the lunch period. The afternoon training session continued with negotiation of the escape and confidence props practiced during the morning. In addition to the props from the morning session, a 21-feet-long wooden entanglement and obstacle confined space tunnel prop

Who trains in a McDonalds Box?

Career Probationary Firefighter Dies During SCBA Confidence Training at Fire Academy – New York

test matrix listing the conditions for successful completion of the SCBA Confidence maze requirement. The props used by the fire academy were constructed at the academy. As the recruit program developed, the design and number of the props and the length of SCBA confidence course increased. The tunnel prop was built from a ladder shipping box and was added to the training in 2018 (see Photo 1). The recruits do not have the opportunity to see or practice maneuvering through the tunnel prop. The first experience is while using an SCBA with a black-out cover over the facepiece.

Photo 1: Tunnel Prop made from a ladder shipping box
(Photo by NIOSH)

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Data:

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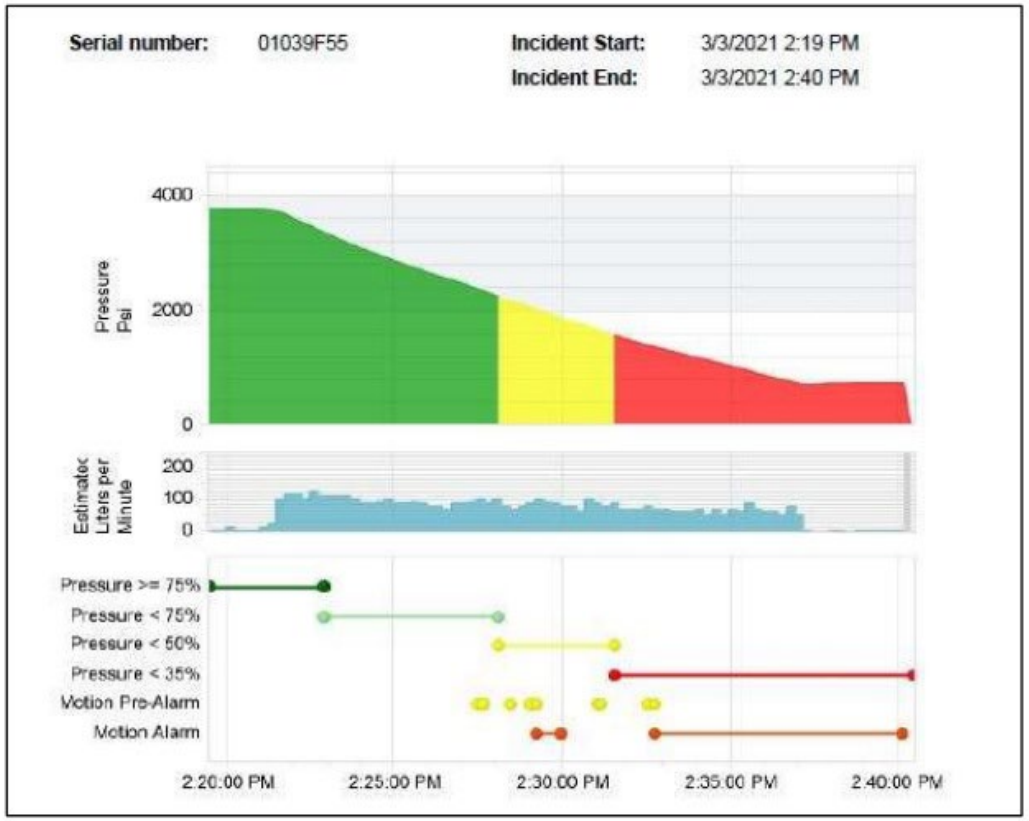

Table 2: The sixth cylinder used on March 3, 2021, which was the second cylinder after lunch. The cylinder was used for two window bailouts, two individual obstacle boxes, two stud-wall channel escapes and the tunnel prop (Photo by SCBA manufacturer)

CDM and Today's Fire Service? How do we become effective?

- **What themes are causing leadership concerns in today's fire service?**
  - **Experience of workforce**
  - **Knowledge of fire behavior**
  - **Training**
  - **Transition Planning**

- **Traditional Solutions?**
  - **Skill and Muscle Memory Training**
    - **Strategic Level**
    - **Tactical level**
    - **Task Level**
  - **Development of Critical Decision Making Skills**
  - **Develop First Line Supervisors**

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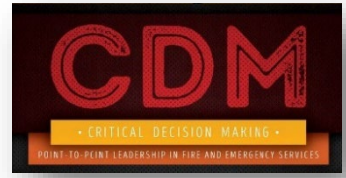

CDM has Limits: What prevents one from being a Critical Decision Maker?

- **Stress**
- **Limited visual references (experience)**
- **Equipment**
- **Understanding the limits of the equipment provided**
- **Physical limits**
- **Intellectual limits**
- **Skill reproduction with lack of senses**

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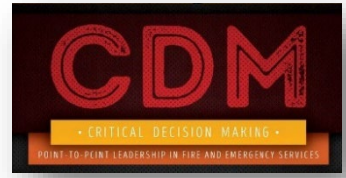
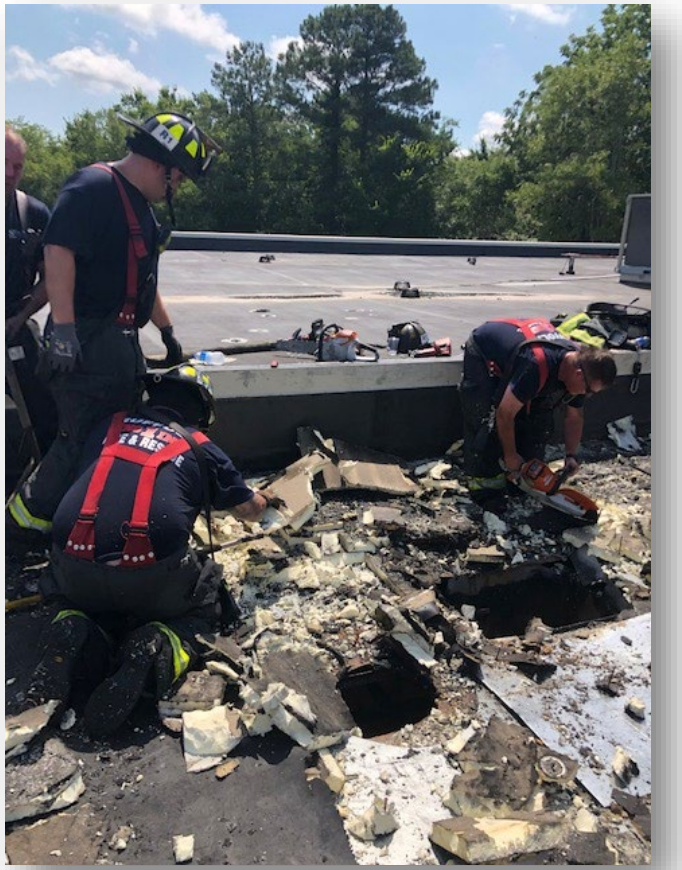


Who is expected to make critical decisions?



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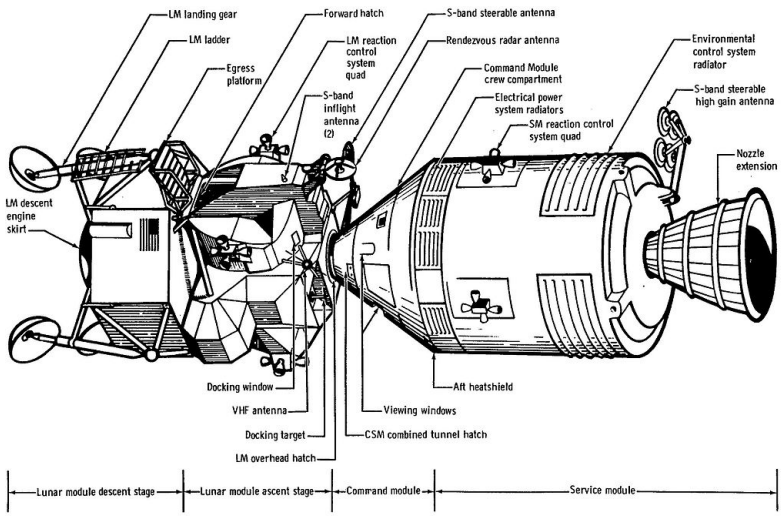
Historical CDM:

- 3 phases of CDM:
  - Anticipation
  - Preparation
  - Execution



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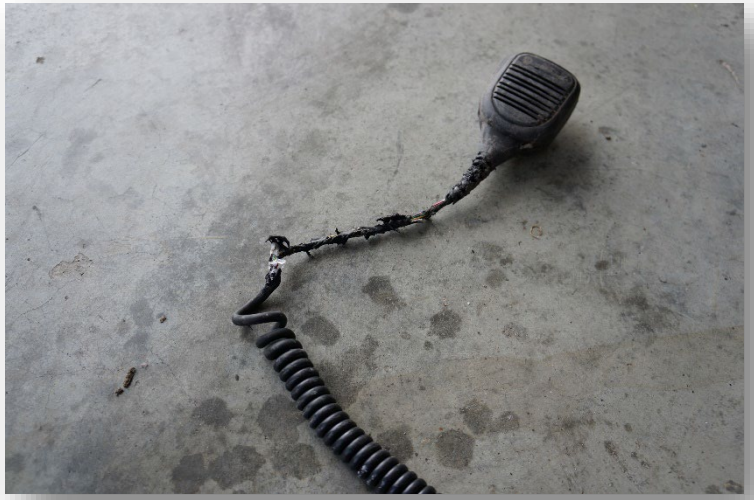
Anticipation? Predicting the inevitable!

CDM starts with Procurement: Anticipation



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CDM: Preparation- Inspire and Lead!

CDM: Preparation: Red Flag, USAF

- Nellis AFB, Nevada

CDM: Execution through Preparation

- Roof Top Rescue 1991 & WTC Bombing February 26, 1993

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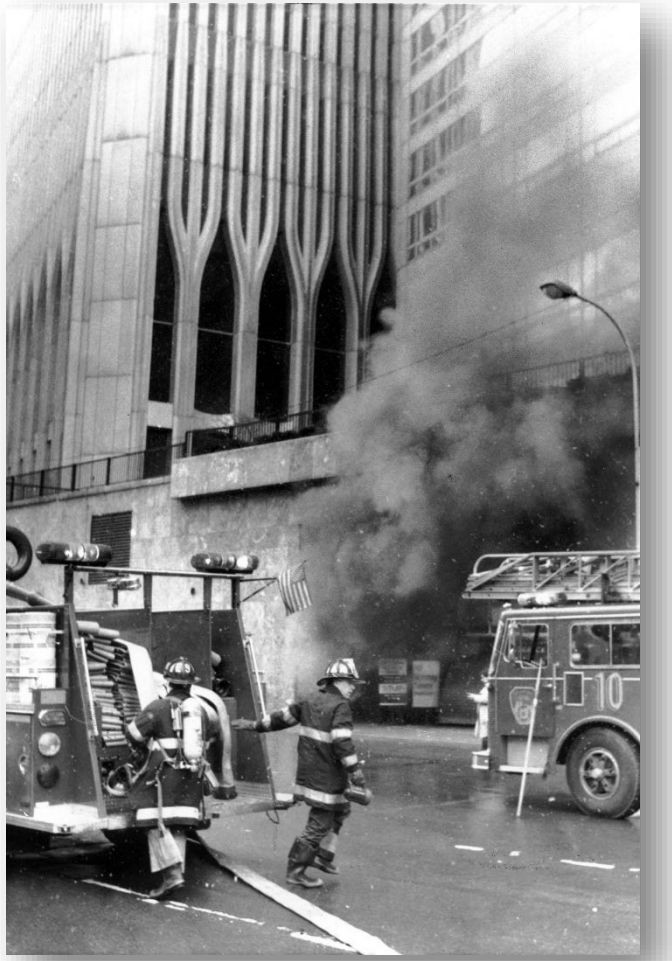
Lets learn from others: Times Square Roof Top Rescue

May, 1991

Kevin Shea, FDNY Rescue 1

Point 1-Citizen needing rescued
Point 2- Successful rescue of the citizen

February 26, 1993 WTC Bombing



Kevin Shea falls in to the crater.
The successful rescue of FF Kevin Shea was the most complex rescue effort undertaken by the FDNY to date.

Is today the day you need to make Critical Decisions by yourself?

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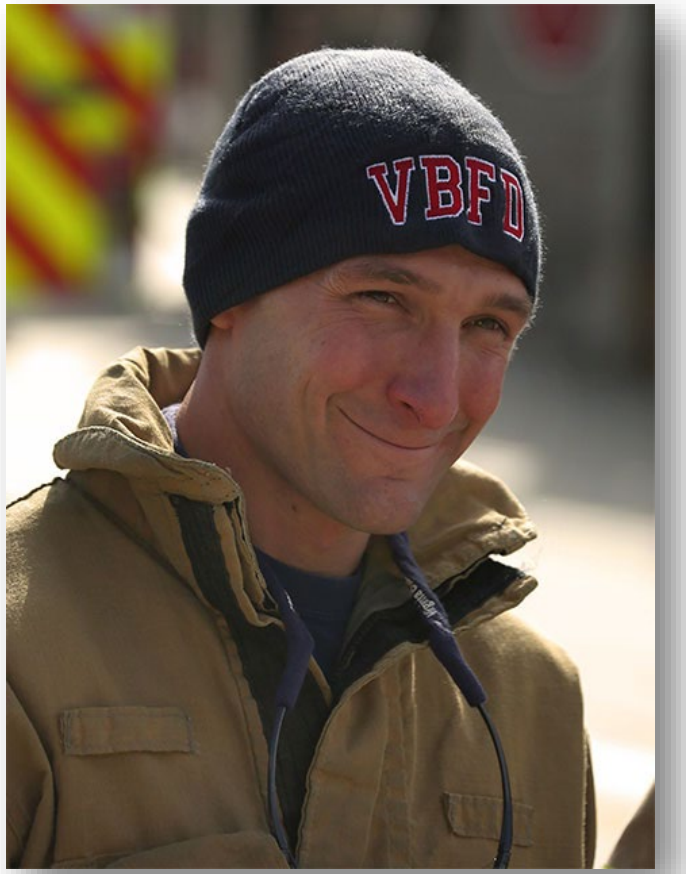
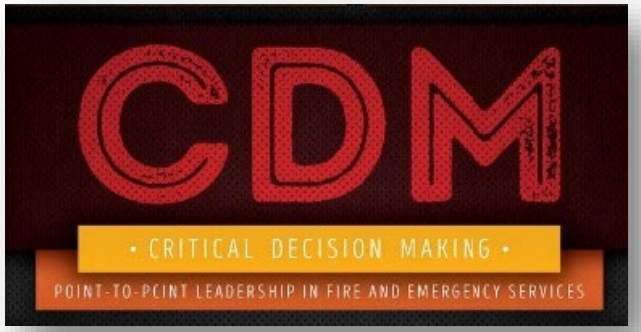
Captain Matt “Chevy” Chiaverotti: LODD April 17, 2023



Expectations:



- By nature, decision making by care providers and emergency responders are challenging.
- Even when we succeed daily when critical decisions are used to mitigate calls and incidents produce stress and “fill our buckets”.
- Case studies identify common incident elements that hinder quality decision making, and it introduces point-to-point leadership.

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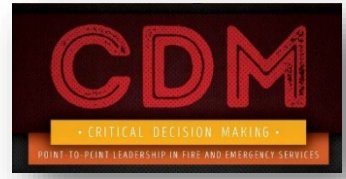

Goal:

- Develop systematic approaches to making critical decisions from the time responders are alerted to an incident to its resolution.
- Understand how to make critical decisions in this dynamic process is what makes great leaders.
- Lead the future of your organization

CDM: The Single Most Important Predictor of Success

- When a critical decision is required, consequences are grand.
- The performance of each responder is the reflection of their preparation and experience.
- Success on a critical incident is not just because the incident commander, engine company officer, training officer, or other supervisor.
- Success occurs when organizations are committed to preparing and supporting firefighters to be critical decision makers.

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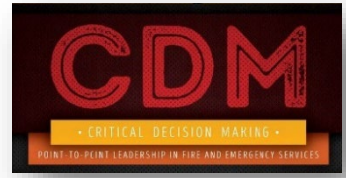

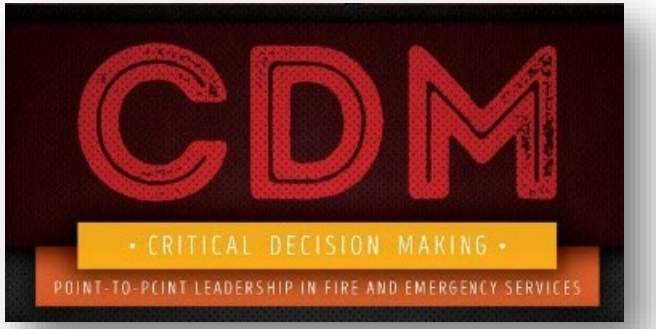

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"Skillful judgement with decisive importance!"

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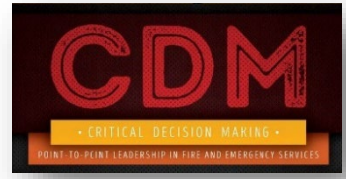

Why is CDM difficult for some?

Cognitive Dissonance (The reason we are not robots!)

- Mental conflict that occurs when beliefs or assumptions are contradicted by new information!
- Cognitive: concern with the act or process; mental processes of perception, memory, judgement, and reasoning as contrasted with emotional and volitional processes.
- Dissonance: Inharmonious, discord, state of unrest.

"Concern regarding processes that lead to discord."

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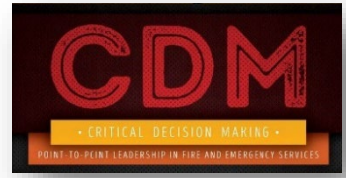

Point to Point Leadership: Points Exist between each Critical Decision: You must progress to ensure success!

- Critical Decision Making is a skill
- Any person in a “leadership position” is judged on their ability to make decisions! Fact.
- CDM is not limited to “who is in charge or designated leaders”
- Not everyone has the ability to make decisions

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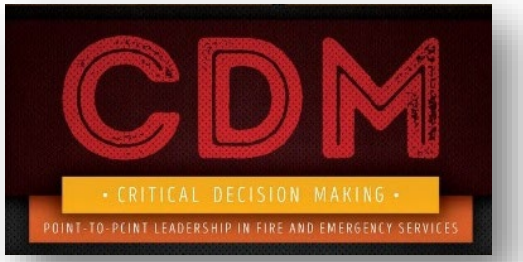
Why Points Exist? Your Choices



- All providers are faced with choices on calls/cases. These choices require someone to make a decision.
- Choices exist when caring for a patient or on each call. These choices lead to decisions that are different among responders faced with the same situation or scenario.
- Critical decision making is highly dynamic. The point presented the responder and the point of resolution is often intense and stressful.

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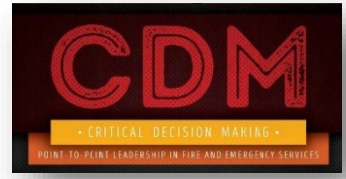
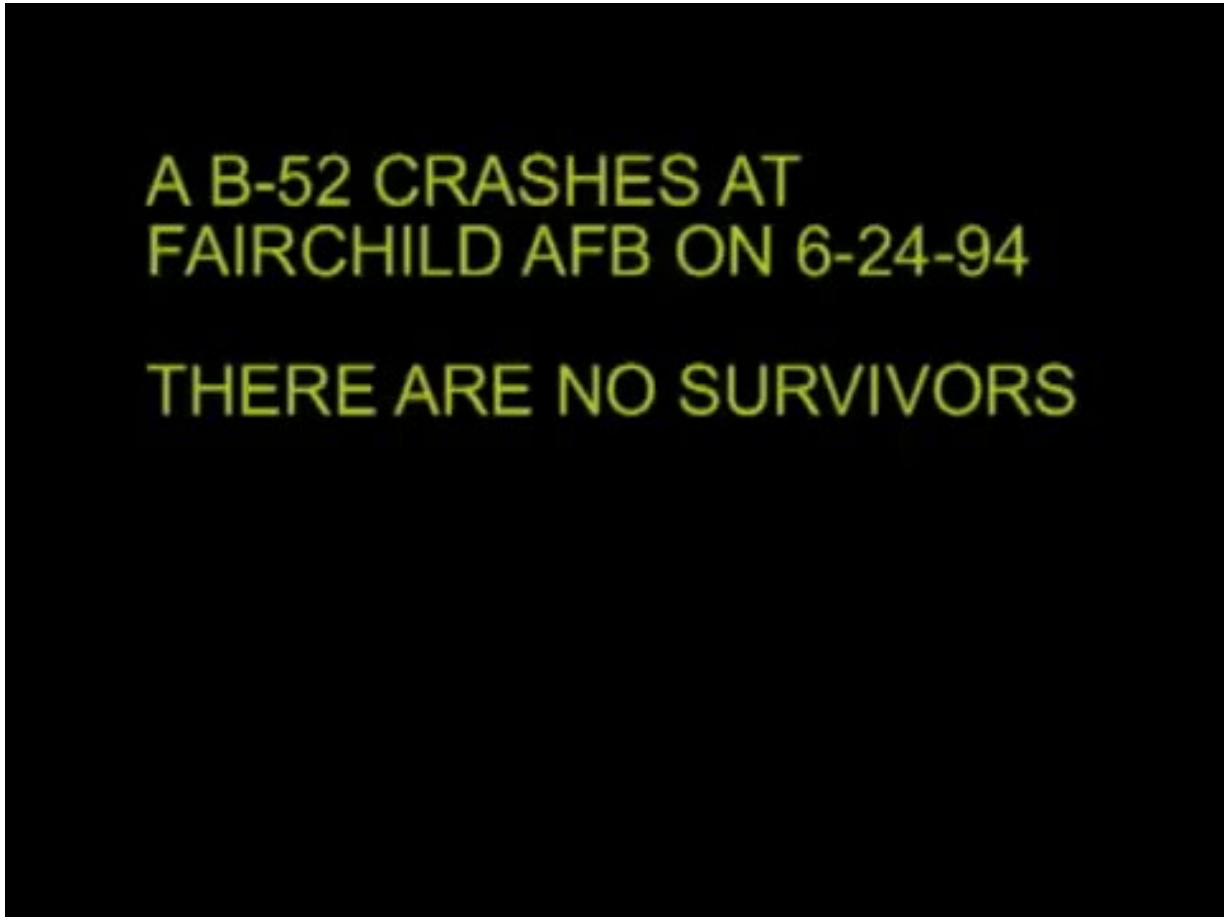


Elements of Demise? When P-to-P CDM Fails

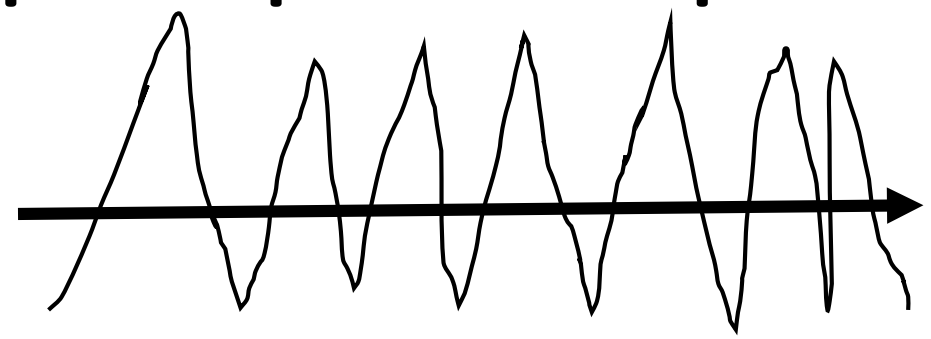
- Time and competition are the leading cause elements of demise
- What other factors lead to poor decisions?
  - Pressure situations
  - Complacency
  - An audience
  - Yes, competition (media, other programs)
  - Showing off
  - Lack of understanding of consequences
  - Never been affected by a similar decision
  - Successful failures

What occurs when we show off in front of our peers?



Concept of point to point leadership

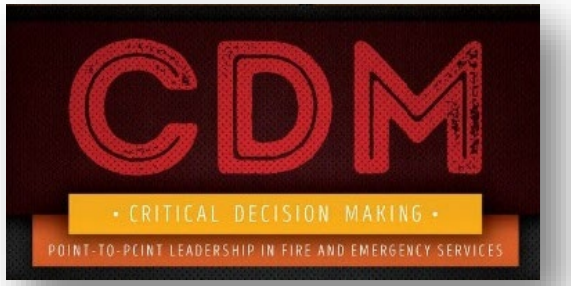
- Starting point



- End point

Avoid the straight line rule!

The number 1 mistake that is made on critical incidents is called the *straight line rule*!



August 26, 2011 EMS Helicopter Mishap

- Operated by Air Methods
- Crashed in Mosby, MO
- Occurred at 18:41 CDT
- Eurocopter AS350 B2
- Left St. Joseph, MO at 17:20 for Liberty, MO-62 miles away

August 26, 2011 EMS Helicopter Mishap

- The National Transportation Safety Board (NTSB) concluded the cause of an EMS helicopter mishap on August 26, 2011, was “fuel exhaustion, poor decision making and the inability to perform a critical flight maneuver.” NTSB Chairman, Deborah A.P. Hersman stated, “This accident, like so many others we’ve investigated, comes down to one of the most crucial and time-honored aspects of safe flight: good decision making.”

August 26, 2011 EMS Helicopter Mishap

- The time needed to make a critical decision and execute an emergency maneuver to save the aircraft and the lives aboard was two seconds. Once the helicopter ran out of fuel, the engine flamed out and lost power. Reports state the pilot "failed to make the flight control inputs necessary to enter an autorotation, an emergency flight maneuver that must be performed within about two seconds of the loss of engine power in order to execute a safe emergency landing."

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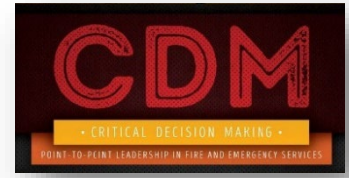

August 26, 2011 EMS Helicopter Mishap

- The investigation found that the autorotation training the pilot received was not representative of an actual engine failure at cruise speed, which "likely contributed to his failure to successfully execute the maneuver."
- How does this relate to CDM in the fire service?

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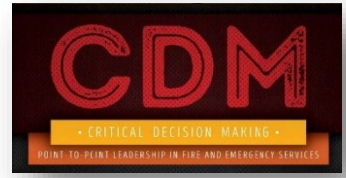
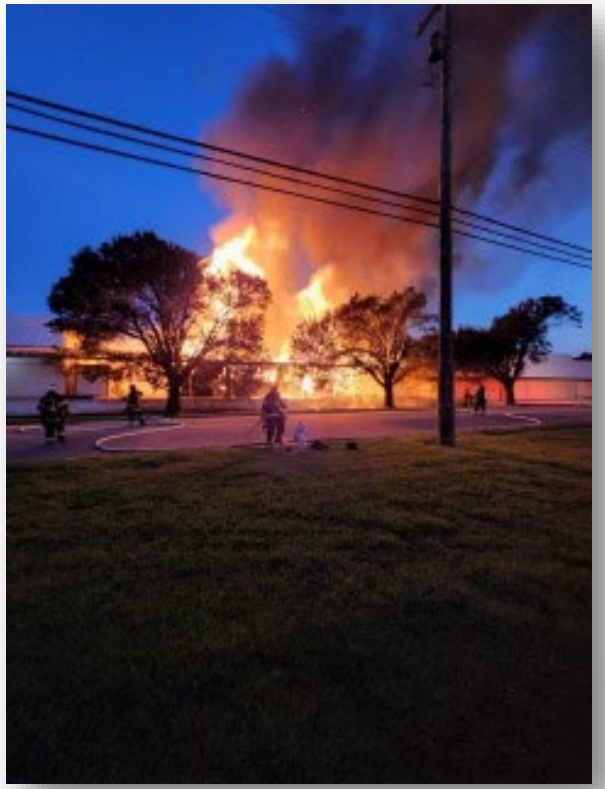


Poor decision-making continues to be cited as the cause of mishaps and deaths of emergency responders.

- Who is responsible to ensure the mission is completed safely?
- Who is responsible to ensure service to the citizens occur in an efficient and productive manner?
- High risk-low frequency events!
  - Gordon Graham's phrase



FIRE & RESCUE
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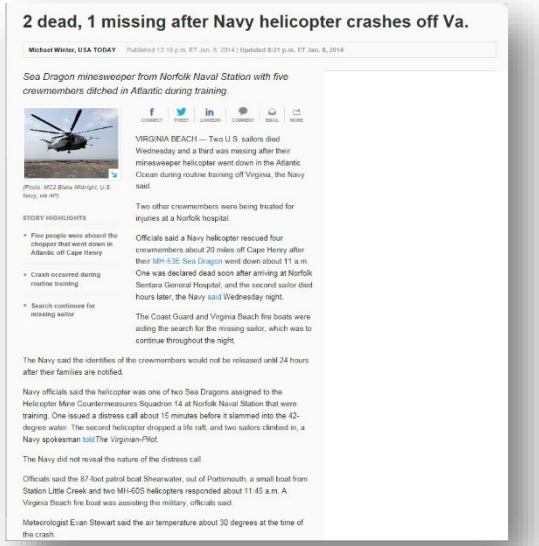
CDM
CRITICAL DECISION MAKING
POINT-TO-POINT LEADERSHIP IN FIRE AND EMERGENCY SERVICES

When points are ignored! Who is responsible? No one is immune of the Straight Line Rule

[NBC Nightly News Report]

MH-53E Sea Dragon caught fire and crashed off the coast of Virginia Beach on Jan. 8, 2014



2 dead, 1 missing after Navy helicopter crashes off Va.

Michael Winter, USA TODAY

Sea Dragon minesweeper from Norfolk Naval Station with five crewmembers ditched in Atlantic during training.

VIRGINIA BEACH — Two U.S. sailors died Wednesday and a third was missing after their minesweeper helicopter went down in the Atlantic Ocean during routine training off Virginia, the Navy said.

Two other crewmembers were being treated for injuries at a Norfolk hospital.

Officials said a Navy helicopter rescued four crewmembers about 20 miles off Cape Henry after their MH-53E Sea Dragon went down about 11 a.m. One was declared dead soon after arriving at Norfolk Sentara General Hospital, and the second sailor died hours later, the Navy said Wednesday night.

The Coast Guard and Virginia Beach fire boats were aiding the search for the missing sailor, which was to continue throughout the night.

The Navy said the identities of the crewmembers would not be released until 24 hours after their families are notified.

Navy officials said the helicopter was one of two Sea Dragons assigned to the Helicopter Mine Countermeasures Squadron 14 at Norfolk Naval Station that were training. One issued a distress call about 15 minutes before it slammed into the 42-degree water. The second helicopter dropped a life raft, and two sailors climbed in, a Navy spokesman told *The Virginian-Pilot*.

The Navy did not reveal the nature of the distress call.

Officials said the 87-foot patrol boat Shearwater, out of Portsmouth, a small boat from Station Little Creek and two MH-60S helicopters responded about 11:45 a.m. A Virginia Beach fire boat was assisting the military, officials said.

Meteorologist Evan Stewart said the air temperature about 30 degrees at the time of the crash.

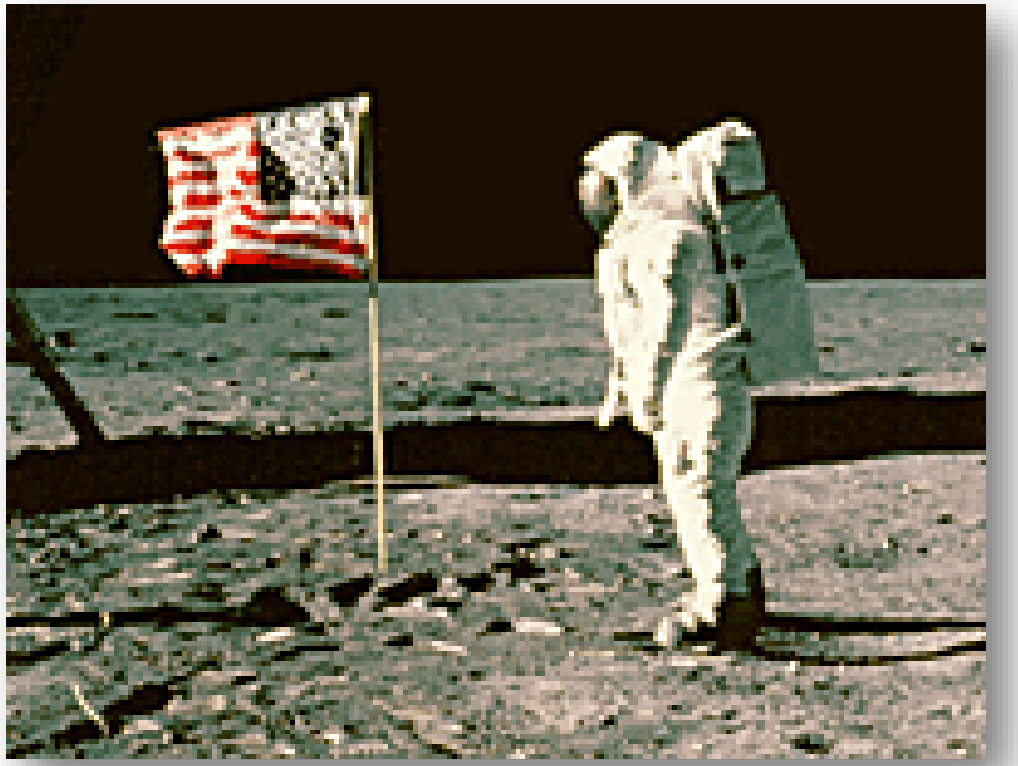
CDM: It occurs at all levels, regardless of rank!

Two pilots and one air crewman died. The pilot, Lieutenant Wes Van Dorn, was an accomplished pilot and was an advocate for his squadron's safety. After going to the squadron in 2010, he identified system problems. He continually notified his chain of command of issues related to the maintenance and care of the aircraft, but Lieutenant Van Dorn's rank gave him only so much power. The Navy, as a scalar organization, limited Lieutenant Van Dorn's ability to foster change. He alone could not be the change agent necessary to fix the problems he identified with the aircrafts.

The cost of poor decision making!

Case study involving NASA: Point to Point CDM:

- What comes to mind when you think of NASA?



NASA

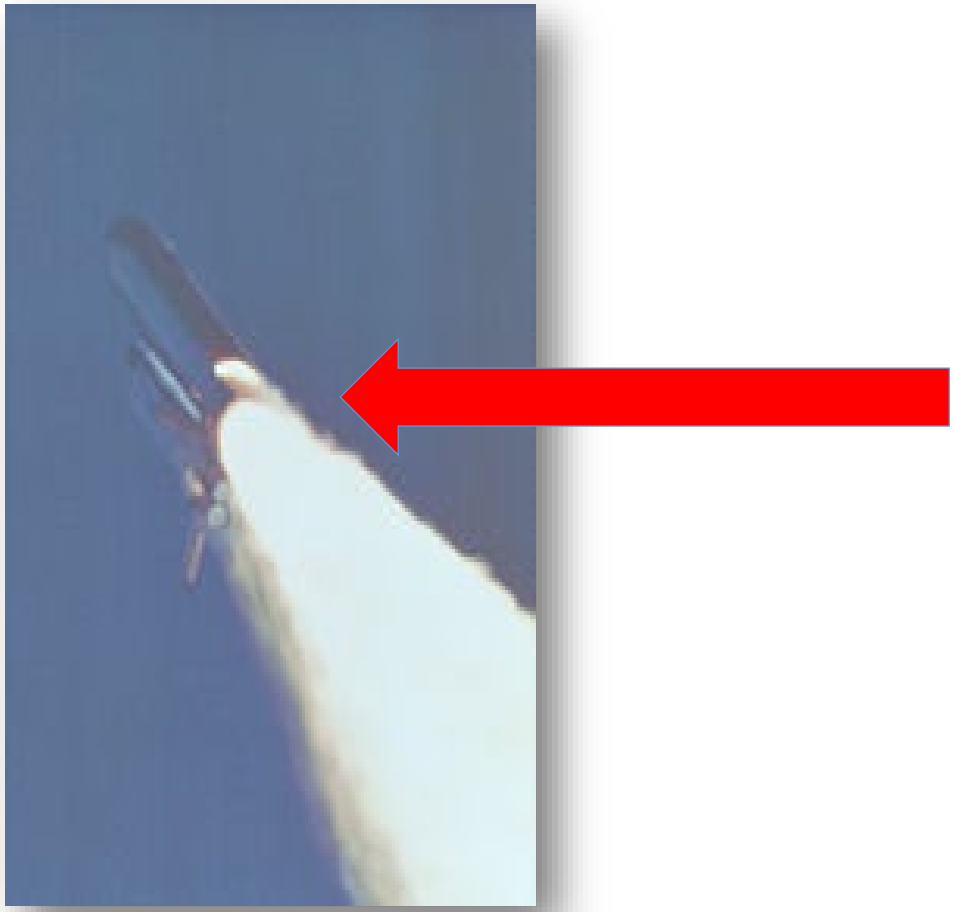
- What has NASA accomplished?
- 6 moon landings
- 12 astronauts walked on the moon
- Stellar safety record
- Robust budget and defined mission
- The best of the best working on/in research and development and only the elite became astronauts

Space Shuttle Program

- 1981-2011 with 135 flights
- Concept started in 1972 to be re-useable space vehicle.
- STS (space transport system) 135 retired the program in July 2011.

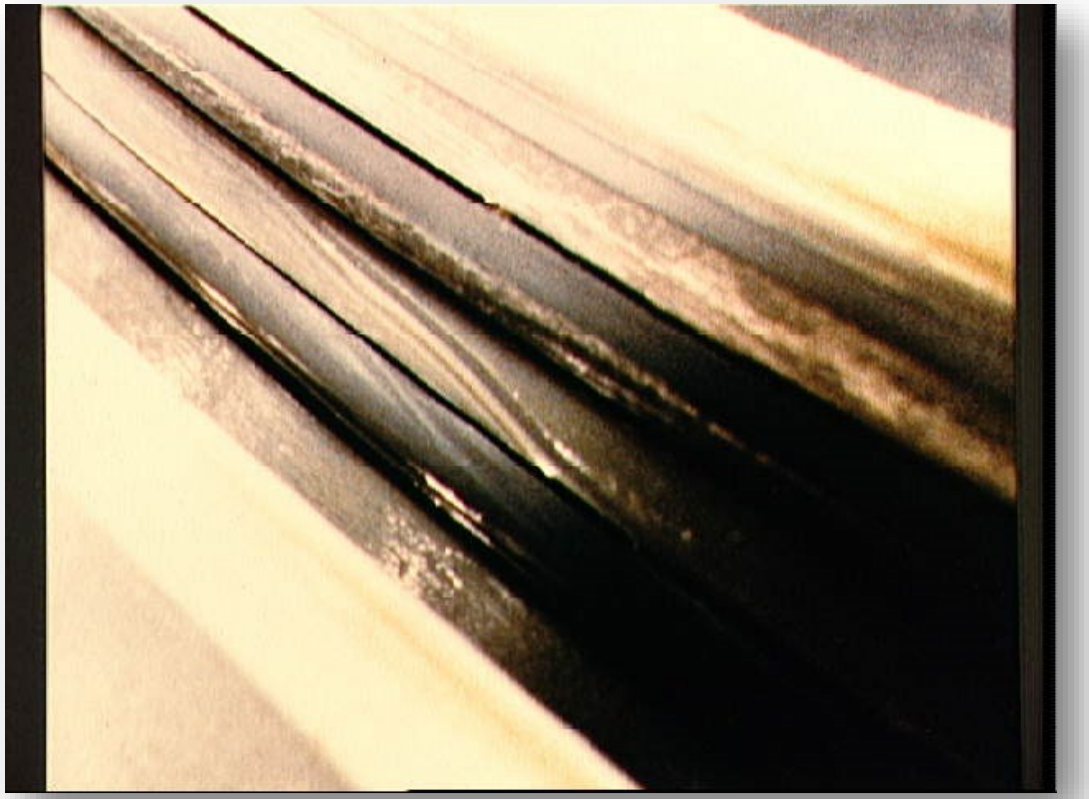
Picture of the solid booster rocket burning and “O” ring leaking fire

Fire from Right Solid Booster Rocket

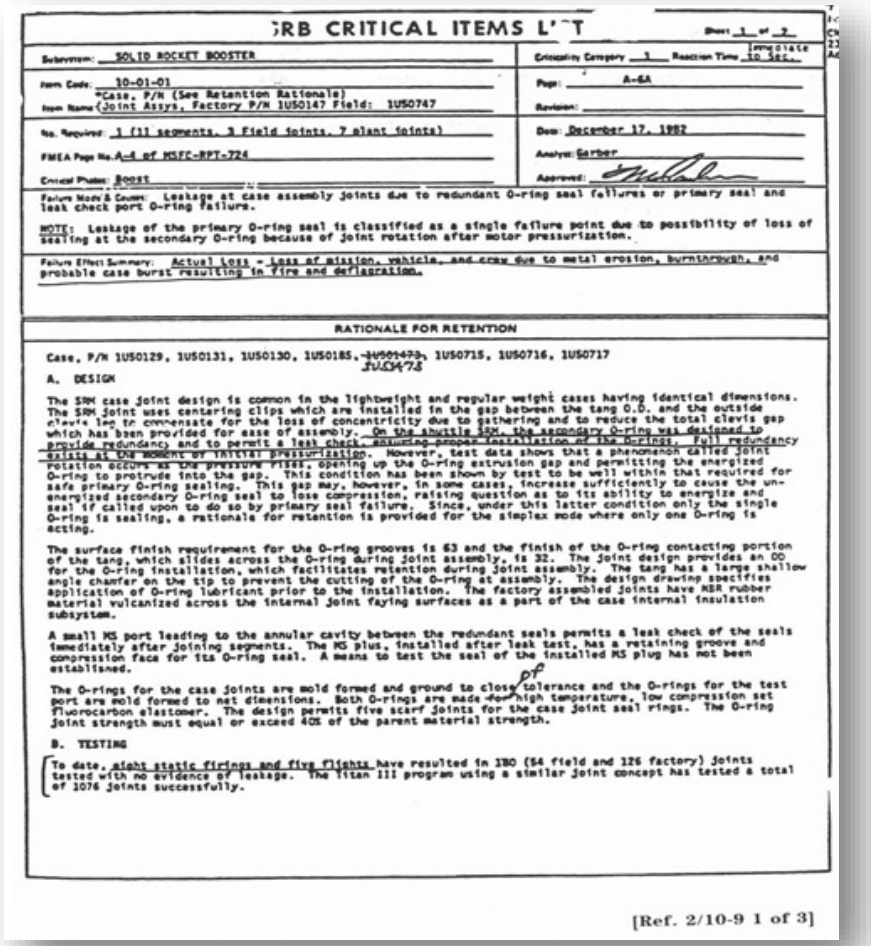


Predictable or preventable?

When an accident occurs that is catastrophic, who is immune from the investigation?



Slide of the correspondence predicting the accident after Launch #2 (December 1982)



SRB CRITICAL ITEMS L[illegible]T

Sheet 1 of 2

Subsystem: SOLID ROCKET BOOSTER

Criticality Category 1 Reaction Time Immediate 10 sec

Item Code: 10-01-01

Item Name: *Case, P/N (See Retention Rationale) (Joint Assys, Factory P/N 1U50147 Field: 1U50747

Page: A-6A

Revision:

No. Required: 1 (11 segments, 3 Field Joints, 7 slant joints)

Date: December 17, 1982

FMEA Page No. A-4 of MSFC-RPT-724

Analyst: Garber

Critical Phase: Boost

Approved:

Failure Mode & Cause: Leakage at case assembly joints due to redundant O-ring seal failures or primary seal and leak check port O-ring failure.

NOTE: Leakage of the primary O-ring seal is classified as a single failure point due to possibility of loss of sealing at the secondary O-ring because of joint rotation after motor pressurization.

Failure Effect Summary: Actual Loss - Loss of mission, vehicle, and crew due to metal erosion, burnthrough, and probable case burst resulting in fire and deflagration.

RATIONALE FOR RETENTION

Case, P/N 1U50129, 1U50131, 1U50130, 1U50185, ~~1U501473~~ 1U50473, 1U50715, 1U50716, 1U50717

A. DESIGN

The SRM case joint design is common in the lightweight and regular weight cases having identical dimensions. The SRM joint uses centering clips which are installed in the gap between the tang O.D. and the outside clevis leg to compensate for the loss of concentricity due to gathering and to reduce the total clevis gap which has been provided for ease of assembly. On the shuttle SRM, the secondary O-ring was designed to provide redundancy and to permit a leak check, assuring proper installation of the O-rings. Full redundancy exists at the moment of initial pressurization. However, test data shows that a phenomenon called joint rotation occurs as the pressure rises, opening up the O-ring extrusion gap and permitting the energized O-ring to protrude into the gap. This condition has been shown by test to be well within that required for safe primary O-ring sealing. This gap may, however, in some cases, increase sufficiently to cause the un-energized secondary O-ring seal to lose compression, raising question as to its ability to energize and seal if called upon to do so by primary seal failure. Since, under this latter condition only the single O-ring is sealing, a rationale for retention is provided for the simplex mode where only one O-ring is acting.

The surface finish requirement for the O-ring grooves is 63 and the finish of the O-ring contacting portion of the tang, which slides across the O-ring during joint assembly, is 32. The joint design provides an OD for the O-ring installation, which facilitates retention during joint assembly. The tang has a large shallow angle chamfer on the tip to prevent the cutting of the O-ring at assembly. The design drawing specifies application of O-ring lubricant prior to the installation. The factory assembled joints have NBR rubber material vulcanized across the internal joint faying surfaces as a part of the case internal insulation subsystem.

A small MS port leading to the annular cavity between the redundant seals permits a leak check of the seals immediately after joining segments. The MS plus, installed after leak test, has a retaining groove and compression face for its O-ring seal. A means to test the seal of the installed MS plug has not been established.

The O-rings for the case joints are mold formed and ground to close tolerance and the O-rings for the test port are mold formed to net dimensions. Both O-rings are made of high temperature, low compression set fluorocarbon elastomer. The design permits five scarf joints for the case joint seal rings. The O-ring joint strength must equal or exceed 40% of the parent material strength.

B. TESTING

To date, eight static firings and five flights have resulted in 180 (54 field and 126 factory) joints tested with no evidence of leakage. The Titan III program using a similar joint concept has tested a total of 1076 joints successfully.

[Ref. 2/10-9 1 of 3]

Why was this allowed to occur? Biggest Failure of Critical Decision Makers: NoD

- Normalization of Deviance
- NASA was allowed to get deviant of best practices
- This led to a predictable “surprise”
- The challenger incident was a predictable surprise as 14 of the 24 previous missions, the inspection of the “o” rings indicated they were touched by fire.

Why was the program not grounded?

- Pressure situation
- It was a best practice to ground the program if a critical component was flawed, and the “o” rings were a critical component.
- Pressure became a guide and short cut was taken to maintain the schedule to fly the missions.
- This stepped away from the best practice

NASA's Short Cut: Failure of Inevitable

- Rationalize the failure learned in mission #2 by performing assembly changes, increase the PSI the "o" ring could withstand and perform testing that produced data that rationalized the failure.
- This provided "tolerance"
- False feedback occurred when noting occurred in the following flights, yet 14 of 24 missions indicated fire had reached the "o" ring.

Outcome: 7 astronauts dead and a program grounded!

Conclusion: The Rogers Commission

THE TRUE COST OF CAUTION:

"The Committee feels that the underlying problem which led to the Challenger accident was not poor communication or underlying procedures as implied by the Rogers Commission conclusion. Rather, the fundamental problem was poor technical decision-making over a period of several years by top NASA and contractor personnel, who failed to act decisively to solve the increasingly serious anomalies in the Solid Rocket Booster joints."

Investigation of the Challenger Accident; Report of the Committee on Science and Technology, House of Representatives.

The “ELEMENTS” that inhibit quality decisions: Failure Occurs

- Internal
  - Education
  - Training
  - Experience
  - Wisdom
- External
  - Time of day
  - Delay in notification
  - Weather
  - Resources available
  - Funding

CDM: The Single Most Important Factor to Success

- When a critical decision is required, consequences are grand.
- The performance of each responder is the reflection of their preparation and experience.
- Success on a critical incident is not just because the incident commander. Success occurs when organizations are committed to preparing and supporting responders to be critical decision makers.

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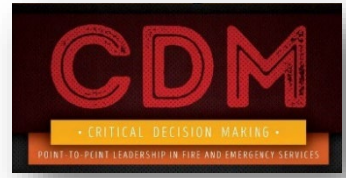

CDM: The Single Most Important Factor to Success

- The performances of emergency responders are in the public eye during large-scale incidents. When emergency services are needed, citizens expect quality decisions and performance.
- Success during critical incidents are based on organizations with a defined chain of command, a manageable span of control, with employees who desire to serve the citizens of the community, while being held accountable for their actions and performance.

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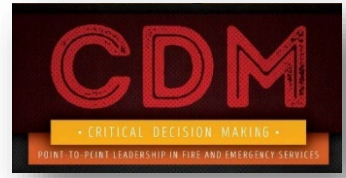


Fire Case Study on CDM

- Rules:
  - 1) This is a real LODD and a brother from Prince William County, VA who gave the ultimate sacrifice
  - 2) We are not to judge, we are to learn and ensure we can build upon the legacy of the fallen
  - 3) Please respect any perspective and thought. That is how we learn.

Case Study: May Day and LODD

- Prince William County, VA Technician 1 Kyle Wilson
- April 16, 2007
- Tower 512

Prior to arrival of Wagon and Tower

0603 hours

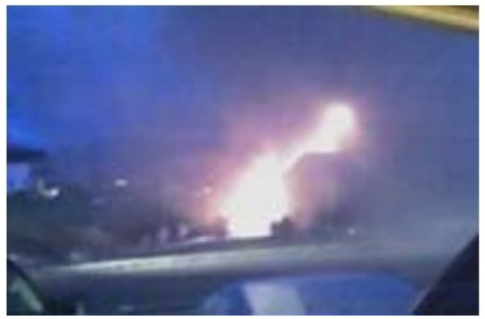
OPSC dispatched a structure fire call for Box 1209 at 15492 Marsh Overlook Drive. Units dispatched for the initial alarm were Wagon 512, Engine 510, Engine 520, Tower 512, Ambulance 510-A, Medic 512-C, Battalion 503 and were assigned radio channel 5-C.

Side C view from neighbor's house Eiderdown Ct. prior to arrival of fire and rescue units

06:08 Hours: Wagon and Tower are on the scene

0608 hours

Wagon and Tower 512 marked on the scene with a two story single family home with heavy fire showing Sides B and C. Wagon 512's officer gave instructions for the next arriving pumper (anticipated to be Engine 510) to pick up their water supply at 15169 Marsh Overlook. See Appendix A for street and unit placement diagrams.



Side B view as Tower 512 approaches (Headlights can be seen on roadway)

Tower 512 arrives on scene – Side B

Wagon 512's officer requested the third arriving pumper to approach the scene from the opposite side in order to establish a secondary water source. Engine 520 acknowledged the secondary water source instructions and requested a fourth engine be dispatched to function as the supply pumper for this task. The address that Wagon 512's officer gave for the primary water source did not exist, therefore contributing to Engine 510 approaching the scene from the wrong direction. When Engine 510's officer recognized the incorrect location was given and their approach to the scene was from the opposite direction, the officer immediately advised Engine 520 to switch assignments and become the water supply pumper for Wagon 512.

Mayday at 06:14

0614 – 0615 hours

(06:14:53 hours) Rescue 510's officer transmitted a mayday radio report about the missing firefighter:

"Rescue 510 officer to, mayday, mayday, mayday, Tower 512 is missing one firefighter; we have a firefighter missing, in the stairwell."

(06:15:06 hours) This was immediately followed by a mayday transmission from Technician Wilson stating:

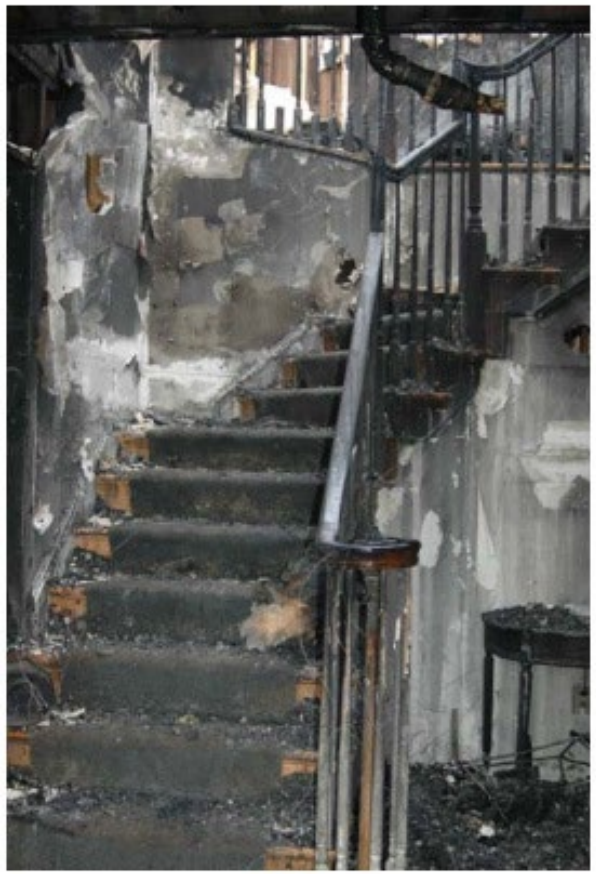
"Mayday, Mayday, Mayday, Tower 512 bucket, I'm trapped inside, I don't know where I am, I'm somewhere in the stairwell, I need someone to come get me out."

Command requested the last message be repeated. There was no response. Command then asked Rescue 510 to repeat their last message.

06:15 hours

Reacting to the immediate firefighter rescue situation, crews advanced the 2 ½ inch hose line into the foyer but were forced out because of extreme heat and fire conditions. As they exited the structure the 2 ½ inch hose line was flowed into the foyer area. The crew realized the water stream was being deflected off the front door as the door had shut again. Wagon 520's crew began to flow their 1 ¾ inch hose line on Side D. Engine 510's crew reacted to the mayday and positioned their 1 ¾ inch hose line to Side A (Quadrant A), but experienced low flow pressure on the hose line. Rescue 510's crew were able to reopen the front door but stated there was significant resistance while attempting to open the door. Rescue 510's crew along with Wagon 512's crew attempted to reenter with the 2 ½ inch hose line. They were joined by Engine 510's crew with their 1 ¾ inch hose line. The entire first floor area around the staircase, the staircase, and the second floor hallway area were heavily involved in fire. Members of the three crews operated the two hose lines in the foyer area to protect the staircase and combat the fire that was progressing toward them on the first floor. Despite the intense heat and fire conditions, other crew members made multiple attempts to ascend the foyer stairs to the second floor. On one of the multiple attempts in these extreme conditions, crews reached the second floor landing area where Technician Wilson was reported to have been but were not able to locate him. The crews were forced back by intense fire and heat conditions.

First Floor Foyer



Foyer stairs to the second floor

06:16 hours

Side B **Side A/D**

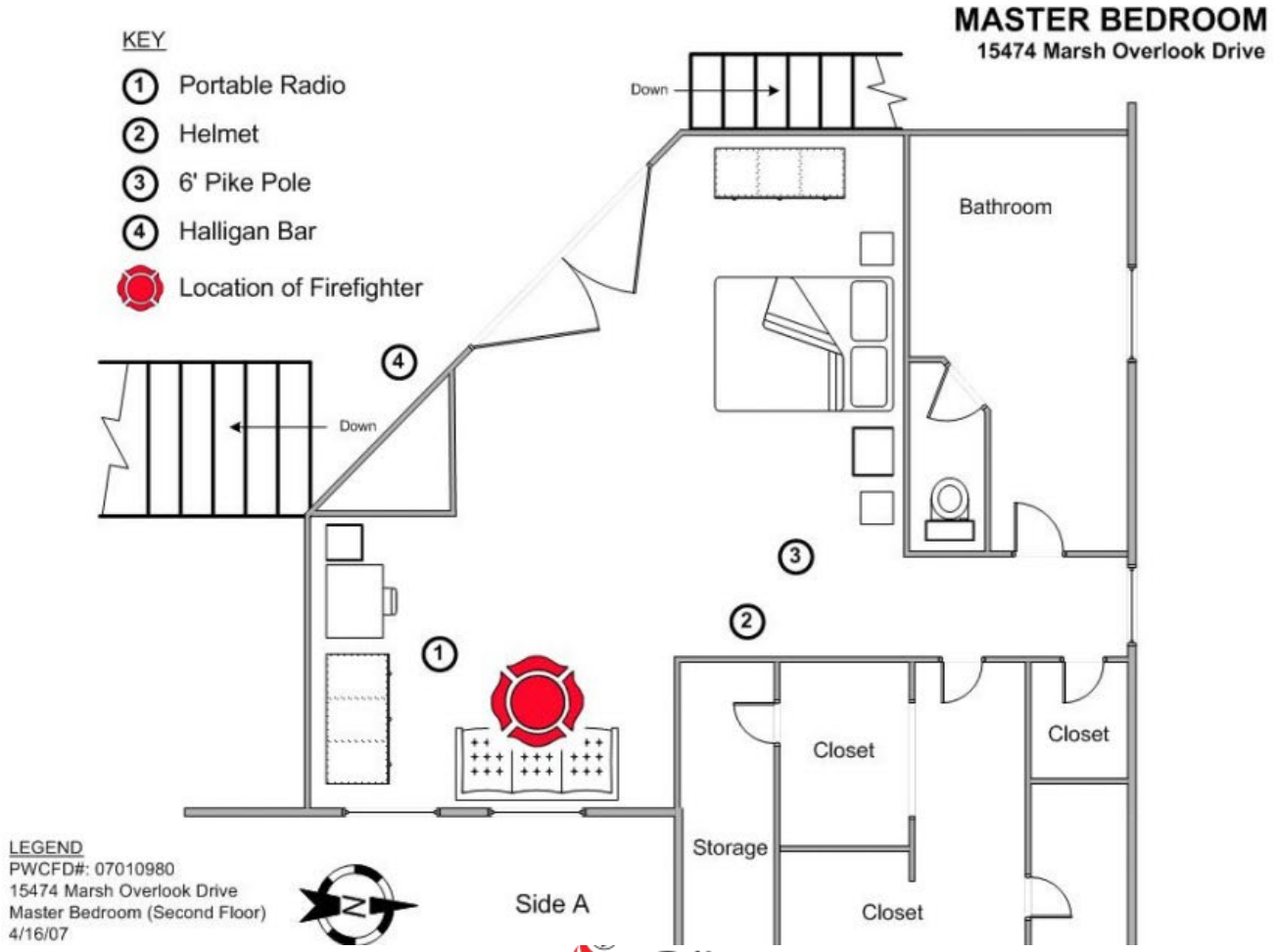
Intense fire and heat conditions are throughout the structure

0616 hours

Command questioned if Rescue 510 needed another crew to assist and Rescue 510's officer replied:

"Not at this time."

PWCFD Technician 1 Kyle Wilson



15474 Marsh Overlook Drive: All CDM

- The major factors in the line of duty death of Technician I Wilson were determined to be:
  - The initial arriving fire suppression force size.
  - The size up of fire development and spread.
  - The impact of high winds on fire development and spread.
  - The large structure size and lightweight construction and materials.
  - The rapid intervention and firefighter rescue efforts.
  - The incident control and management.

https://www.iaff.org/hs/LODD_Manual/LODD%20Reports/Prince%20William%20County,%20VA%20-%20Wilson.pdf

Lets discuss the following:

- Who is responsible for the safety of Kyle
- Risk vs Reward
- Was the training adequate for Kyle? For the officer core?
- CDM and point to point leadership-what happened to the point of arrival and the point of resolve?

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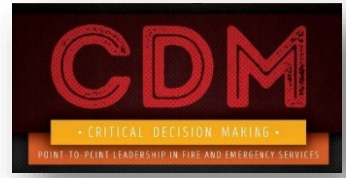
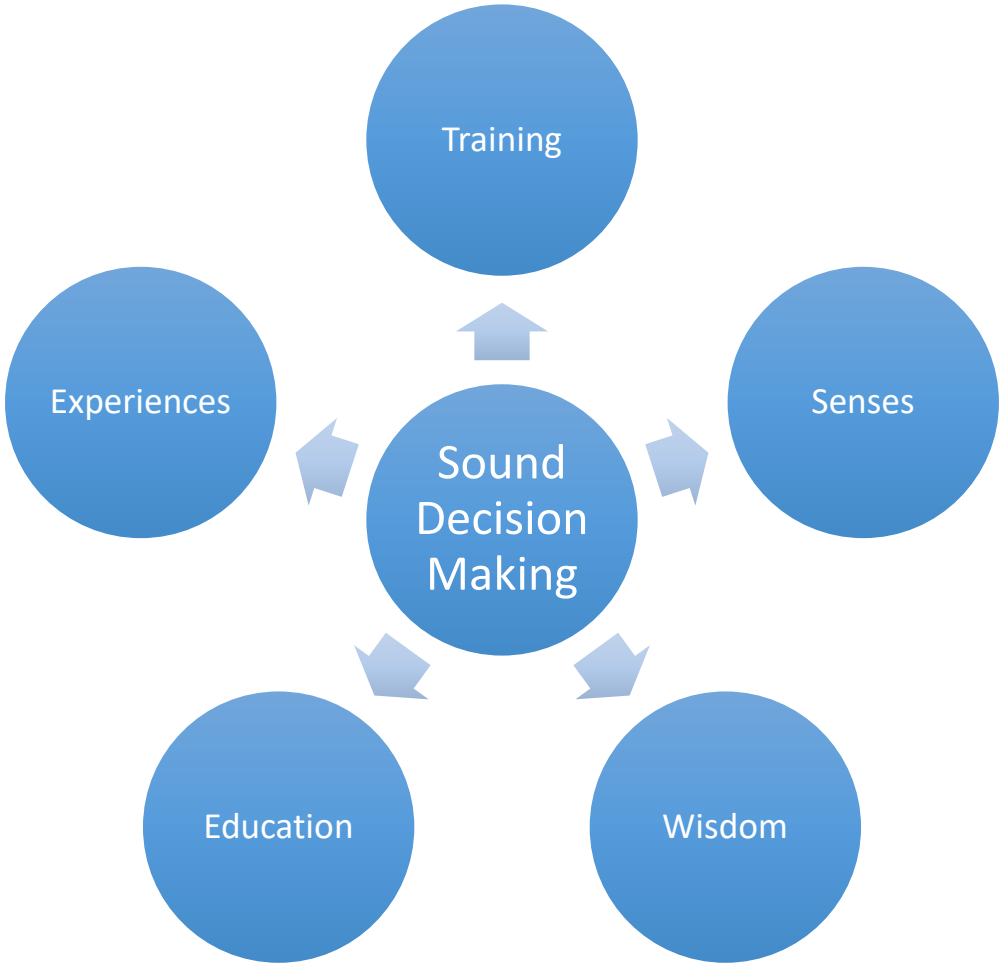


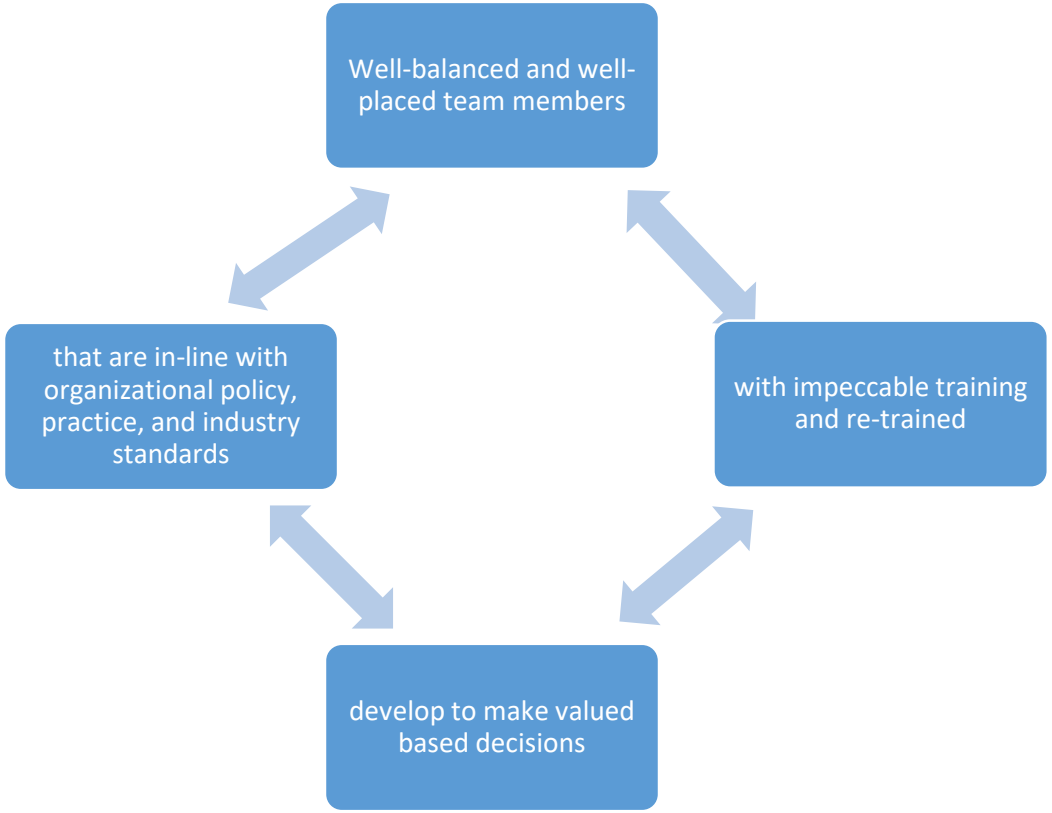
Development of Leaders is predicated on CDM:

- Ability to make critical decisions
- Difference in efficient and effective operations and results
- Team: Must be surrounded by quality team mates

How to make sound critical decisions:



Your Team in Critical: Team Success and Team Based CDM occurs because:



The decision making capabilities of responders lead to:

- Life and death of responders
- Saving or not saving civilian lives
- Injuries to responders and public
- Public outcry
- Embarrassment
- Success

FIRE & RESCUE
SUFFOLK, VA
EST. 1884

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CDM
CRITICAL DECISION MAKING
POINT-TO-POINT LEADERSHIP IN FIRE AND EMERGENCY SERVICES

Can an acronym lead to CDM?

- SLICERS
- RECEO, VS
- AEIOU
- I before E except after C
- OMG

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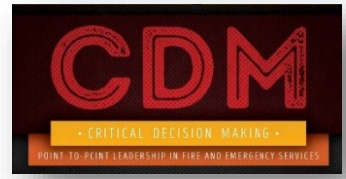
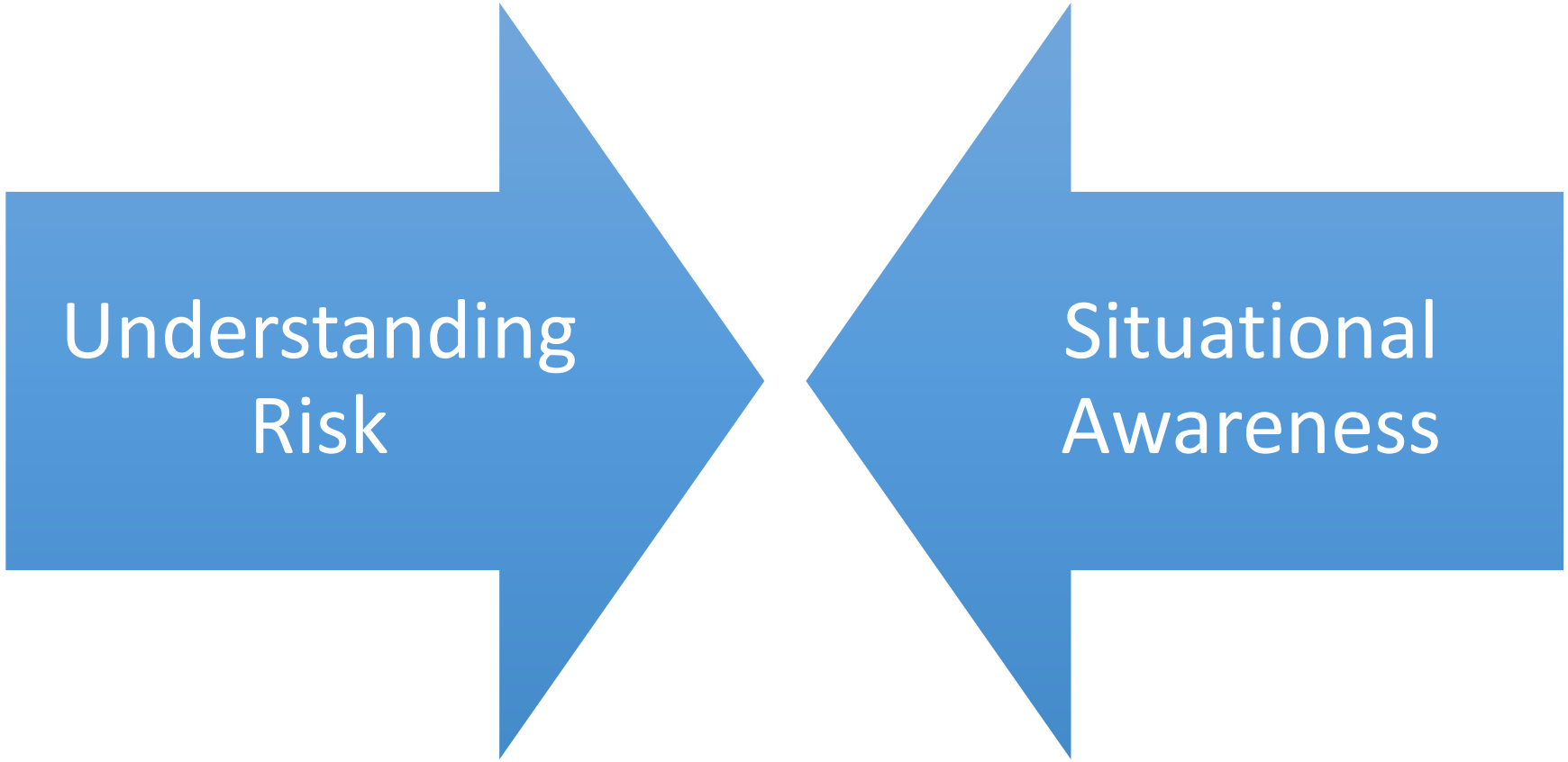


Critical decision makers understand risk and have situational awareness



Fire Based CDM Discussion: Straight line Rule leads to Failure!

CDM and SLICERS

- **The Size-up sets the stage for the following steps of Locating the fire, Identifying flow path, Cooling the atmosphere, then Extinguishing the fire. Taking any of these initial steps out of order can jeopardize the effectiveness of the operation. Only Rescue and Salvage are items of opportunity that may be completed at any time based on opportunity and need.**

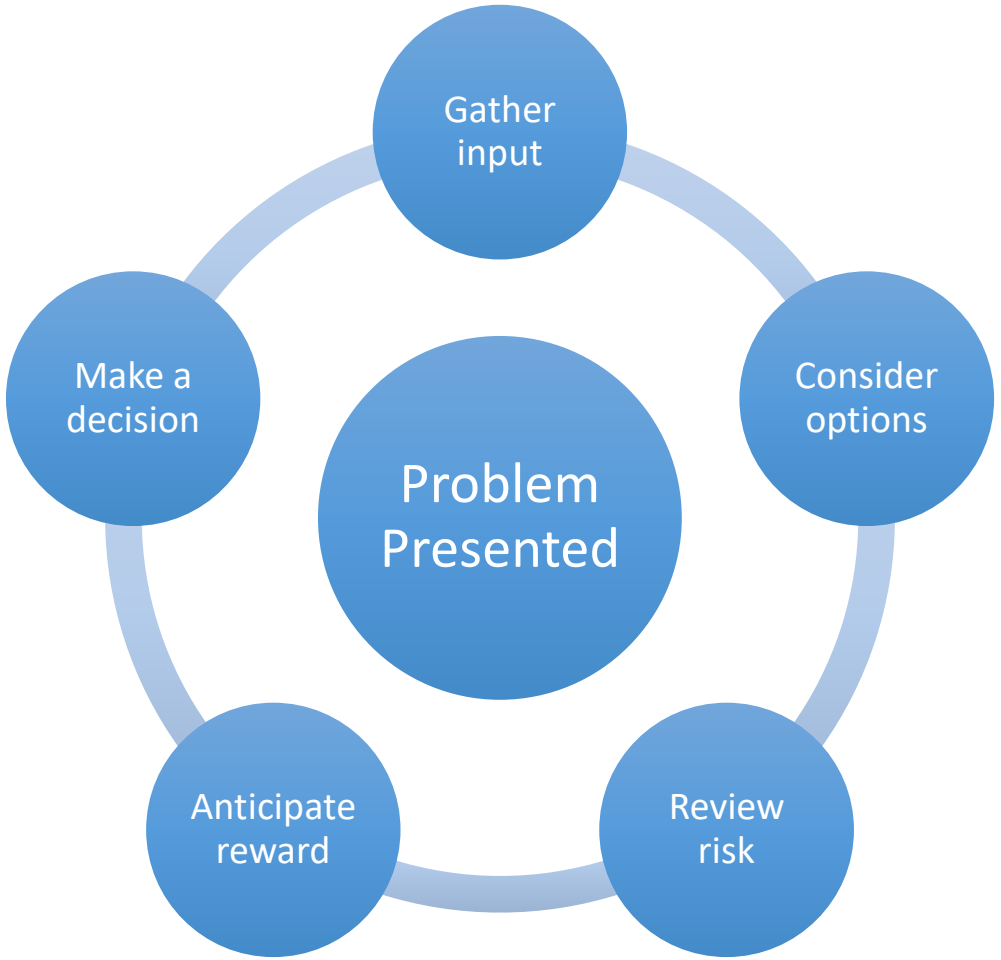
SLICERS

Critical Decision Making is a skill: Can it be Taught or Learned?

- Able and Willing Model

Able/Willing Model	⇒	
	Unable/Willing	Able/Willing
⇑	Unable/Unwilling	Able/Unwilling

The CDM Continuum: Time and Stress Included



FIRE & RESCUE
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CDM
CRITICAL DECISION MAKING
POINT-TO-POINT LEADERSHIP IN FIRE AND EMERGENCY SERVICES

Finally, CDM is about “Doing Your Job”

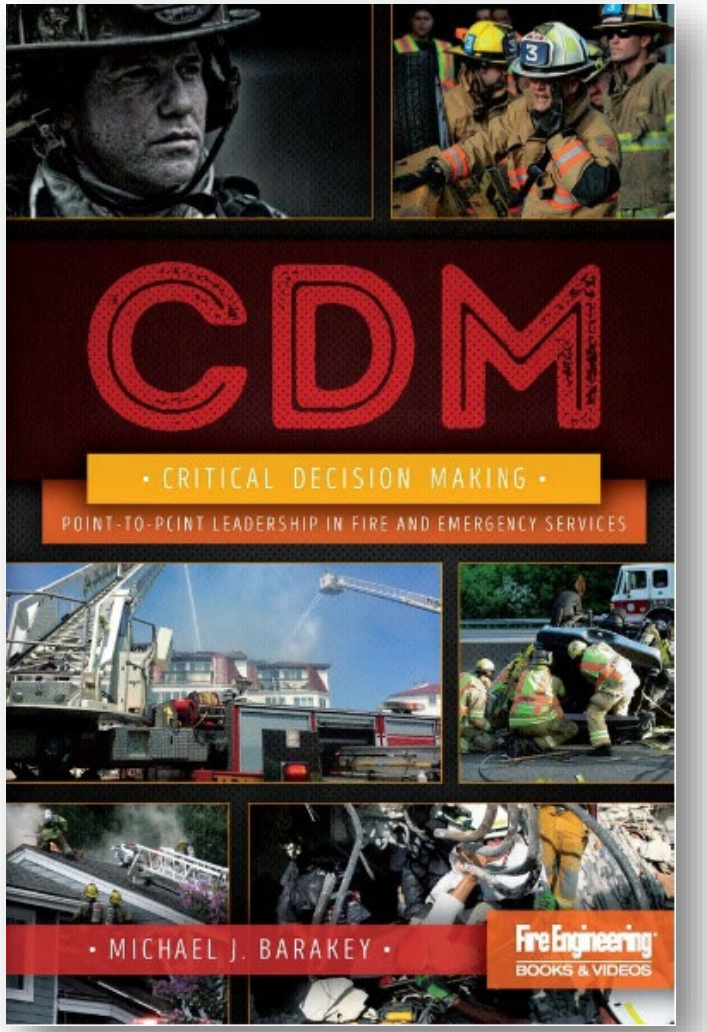
- Engage
- Be Present
- Listen
- Connect
- Understand
- Enjoy the position and your crew!

A Leader Executes CDM!

As we Close, The traits of a CDM and Leader:

- Dependable
- Present (assessable)
- Knowledgeable
- Honest
- Passionate
- Respected
- Confidant
- Caring
- Clear expectations
- Has Integrity
- Compassionate
- Shares Vision
- Engages
- Humble
- Communicates
- Appreciative

My passion has lead me to write a book



Fire Engineering Books & Videos