

Training Volunteer Company Officers:

The 10 Foundation Stones of Fireground Knowledge They

Must Possess

and Why

By Joe Nedder

This article was created to support my class [Training Volunteer Officers](#). It will give you additional information, points to ponder and help to create a roadmap for training your Company Officers.

PART 1 - AN APPEAL FOR PROACTIVE COMMON SENSE WHEN IT COMES TO TRAINING VOLUNTEER FIRE OFFICERS

As a member of the Volunteer/On-Call Fire Service for 36 years I can honestly say I have seen totally opposite extremes when it comes to the quality and capabilities of Company Officers. Without beating the same drum over and over again, we must realize and accept that today all firefighters are facing extremely more dangerous situations, fires, rescues, etc. than ever before. It is a fact that we need to make sure that our company officers really are capable of leading the crew in and out of danger in a safe and responsible manner. I clearly recognize that many departments have strict promotional requirements that require skills and knowledge, but there are many other volunteer organizations that do not. The reasons vary, but we always seem to hear the same core reasons:

- It's too much to expect from volunteers.
- People don't have as much time as they use to
- We don't have a lot of fires.
- We do things differently in our department.
- And my favorite, we never needed it before!

The list could go on and on! But if a reported working fire came into any of those departments right now, and they chose to initiate an interior attack they would be exposing their members to the same life and death dangers that we all face! If you don't want the knowledge, for whatever reason, then I have to question your ability to make a safe and effective interior attack. Perhaps the surround and drowned

method might be a safer choice! But, if you want to make entry and safely and effectively do the job today, then the officers must be properly trained and educated.

The purpose of this essay is to provide company officers, acting officers and those aspiring to be officers:

- A better understanding of what the role of a great company officer really is.
- what responsibilities go with the rank
- What skills and knowledge you really need to have as a baseline to professionally do your job

The main focus of this article will be on fireground skills as I think this is the area where officers can have the biggest impact, positive or negative, on their fire department.

Before we review and discuss my 10 Foundations Stones of Fireground Knowledge I would like to explain to you my core philosophy that is the basis of this essay. First off, I believe that there are only 2 types of people on the fireground, firefighters and civilians dressed as firefighters! If you don't have the proper skills and cannot do the job, then why are you on the fireground? There are jobs for many of us besides interior firefighting, but if you are on the fireground and your help is needed to intervene on a bad situation, can you do the job? Secondly, I believe that the only difference between any firefighter is their training and their ability to do their job safely and efficiently. I am very passionate about this subject and hope to impress upon you why the skills I am presenting really matter. It is not my intention to cause hurt feelings, or engage in disagreements, nor do I think I have all the answers. What I do know is that fighting fires today is significantly different than in times past. We cannot cling to the old adage of "that's how we (fill in the blank with your department name) do it!

Let's face it, we have all worked with or seen firefighters or officers that scared the heck out of us with their lack of knowledge or skill! We all have heard of, or know others who think that belt buckles, t-shirts and 732 blinking lights on their pick-up truck makes them a volunteer firefighter. I'm here to tell you all that this is not true. *The only thing that makes you a great firefighter or company officer is your training and your ability to do the job!* It is the #1 thing that will keep you current, capable, and safe.

As volunteers we can never:

- think that since we are "only" volunteers we don't need intense training from within our department or from outside opportunities.
- Think that the title of firefighter is all that you need.
- Think that fires are different for volunteers.
- Think that you learn it once and retain the knowledge and skill for a lifetime.

All of these are falsehoods and can injure or kill firefighters! Believing that any of these 4 points are true is to degrade the volunteer fire service and that is something we cannot allow to happen!

One of the most repeated complaints I hear from other firefighters is that their department, or a certain individual or officer, won't train and learn new things (by the way, learning new things is called staying current!). At the root of this ongoing complaint is usually complacency. The definition of complacency is "a feeling of contentment, especially when accompanied by unawareness of actual dangers or deficiencies". What we all need to know and remember is that **COMPLACENCY KILLS AND INJURES FIREFIGHTERS!** It is time we move past this type of nonsense and danger and move forward.

As Company Officers the decisions you make and the skills and knowledge you possess really do matter.

It can be a matter of life or death! Look into the NIOSH LODD reports as it pertains to Volunteer

Firefighters. We tend to see many of the same things repeated over and over as **contributing factors**,

they include:

- lack of implementation of ICS
- Improper size up
- Lack of basic knowledge of fire behavior
- Lack of understanding as it regards risk assessment
- Lack of scene management
- Risk management principles are not effectively used.
- Lack of a properly trained Incident Safety Officer (ISO)
- Rapid Intervention Team not established.
- Ineffective training
- Lack of, or use of an Accountability System
- Lack of understanding in regard to building construction

Authors note: For simplicity I have taken the liberty to condense the "contributing factors" into similar groups and/or categories.

Why must we continue to learn by the death and injuries of others, when the same contributing factors seem to always be in play?

The Volunteer Company Officer

What do you think is the #1 role of a company officer? As a member of your company, I want it to be that you as the Officer can stand before me and say "follow me, trust me and I will bring you out safe and sound" and that your Officer skills, training, and presence of command say that you can! In other words, can you really do your job?

We can ensure this by accepting the fact that great fireground skills are a critical qualification of any officer and that these skills will directly affect the operation and safety of all fire personnel working at the scene. It really is the true measure of how well you can do your job.

Over the years I have had the opportunity and honor to visit with or talk to many different volunteer firefighters from around the U.S. I have figured out that there are 3 basic ways you can be promoted to a company officer. They are:

- Option # 1 - Study, test, do well, and be appointed.
- Option # 2 - be elected, hopefully with some prerequisites.
- Option # 3 - You are appointed, no qualifications.

How your organization chooses to appoint officers is their decision, I will not sit in judgment, nor should others. But I have to ask one question. Is the person capable and ready to do the job?

My concerns are:

- a Deputy Chief who has a total of 2 or 3 years of total experience in the Fire Service
- A person given rank because he is popular, but has no experience or the skills and training needed.
- The attitude that "we don't need that stuff" when it comes to qualifications.

- But most importantly, any method that does not value the importance of training, capabilities, skills, leadership, and our core values.

I have often been asked what makes a good Volunteer Company Officer. Later in this article we will lay out what I think are the foundation stones of knowledge you must possess. But here is what I think are not very good qualifications:

- Has shown up every Sunday for 5 years to wash the engine.
- Makes a lot of calls.
- Related to someone
- Popular and the members want him.
- Does a good job running the pump, nozzle, or turntable.
- It's his turn.
- And everyone's favorite; has a pulse and will take the job!

Are these the traits we should be looking for? Where are the skills and training needed to protect your life and the lives of all other firefighters when operating?

What we really need is leadership! The traits of a good leader are numerous, for this conversation I think they include:

- First and foremost, they are passionate about the job! Who wants to follow a leader who is not passionate about what they are doing.
- Safety oriented

- Proactive
- Decisive
- Objective
- Calm
- Quick Thinking
- Adaptable, flexible
- Realistic about personal limitations (we all have them)
- Current
- Capable
- Well trained
- Understands their role
- Team player
- Good listener
- Great communication skills
- Recognizes that training is an ongoing process
- Is a teacher, mentor, and coach to others

This list is based upon many years of talking with others as to what traits they expect from their volunteer officer.

I think I can sum it up simply by saying: "you might be able to say it, ***but if you can't show it, you don't know it!***"

So how do we move forward?

This is the question that so many have pondered for so many years! We can use the NFPA 1021 as a template, and one of the numerous textbooks that are based upon it. Many people I have spoken with over the years have told me that they disagree with the notion that we need to train volunteer officers differently. They believe to train them differently is saying that all firefighters are not the same. Well, note to self, ***we are not all the same!*** How can we compare Urban firefighters to Rural firefighters? The challenges and issues are very different. Tell an urban firefighter that the nearest hydrant is 1 mile away, or that the 1st due piece with 3 on board is the only due piece for another 5 to 15 minutes and they might think you are out of your mind! Conversely, tell a rural firefighter that the fire is on the 10th floor, and that in 2 minutes time the IC will have to assign and manage 25 to 35 firefighters and watch his reaction! Not all volunteer organizations are in rural communities. It is, however, safe to say the vast majority are either rural or suburban, have staffing problems, are constantly recruiting, and face the challenge of getting people to attend training. We are different. We have different problems and challenges, we struggle for people's time and for so many of us, the fire calls are infrequent enough that skills can and do deteriorate.

I think that the volunteer service needs to take a somewhat different approach. First off, we must recognize that the #1 place a volunteer company officer will have a significant impact on his department is on an active fireground. Many larger Departments can offer their future officers a lot of real time experience when they respond. But, for so many of us, the fires seem to come few and far between! Learning on the job is not an available option. I believe that some of the original (1976) foundation of the NFPA 1021 Standard for Fire Officer Professional Qualifications was the belief that the officer candidate was gaining knowledge through actual experience. Let's be realistic, how many of us can say we can do that today? There are many departments that might see 1 structure fire a year! What this

means is that *we need to set a priority to teach our company officers and officer candidates what they need to know to be effective and safe leading a Company on the fireground.* To help us achieve this I am suggesting what I call the 10 Foundation Stones of Fireground Knowledge.

PART 2 -THE 10 FOUNDATION STONES OF FIREGROUND

KNOWLEDGE

Hopefully, you now have a better understanding of my philosophy on why Volunteer Officers need better training, and have found some merit in it. From here let's talk about what training needs to be a priority in order for them to be effective on the fireground. I call my list the 10 Foundation Stones of Fireground Knowledge. Remember a foundation is what you build upon, it is critical that any good structure have a solid foundation or the building will collapse. Without this fireground knowledge your operation might also collapse into a tragic scene.

The 10 Foundation Stones are:

1. How to be an effective leader
2. Fire Behavior
3. How to read smoke
4. Decision making and incident action planning

5. Strategies, Tactics and Tasks
6. The brief initial report
7. Size up: initial and on-going
8. Building construction for the fire service
9. Risk assessment (risk vs. gain)
10. Accountability and crew integrity

How can you be a great company officer and not understand these things? Are we really safe, effective, and capable without this knowledge? We cannot fool ourselves; firefighters' lives depend on us being able to do the job. NIOSH LODD reports bear this out.

We are going to review and briefly discuss each of these learning stones. For some I will pose several questions for you to consider and do a self examination. I say briefly because each subject is more than reading this essay to become competent and capable. Your goal should be to identify what you need to do to get to a plateau of competency and then retain it for your career. The intent here is to get you to an awareness level where you recognize what needs to be done and you then seek out the knowledge by taking classes, attending seminars on the subjects, attend FDIC, and read whatever you can find on the subject. A close friend of mine, Lt. Pat Lynch of the Chicago Fire Department recently retired. Pat has always believed that we are all "students of the game". What he means is that as firefighters we must always look to make ourselves better and more skillful to stay a safe and effective firefighter. I cannot think of 1 great athlete, in any sport, that does not look to improve and better themselves and their team. It is a great and powerful concept to apply to our fire service. I share this philosophy with him and hope to convince all of you reading this essay to embrace the concept for the good of our fire service, and the safety of all.

Foundation Stone #1 -Effective leadership

Earlier we reviewed what I think are the qualities of a good leader. Besides having these qualities, a capable leader *must apply* them in order to be a competent manager. The members of your company depend on you. How you communicate with them, conduct yourself, set the professional tone on the fireground and at training will directly affect your company. How you lead and manage will directly affect how they do the job and how effective they are. To quote Donald Sutherland in the movie the Dirty Dozen "Very Pretty General, but can they fight?". For us this means we might be dressed the part, but we can do the job.

As Volunteers I believe that Company Officer Management is broken into 2 roles:

1. Emergency scenes, training, and official FD activities
2. Fire Department social activities (yes you read it correctly!)

For decades we volunteers have been boasting to the public that we are 'on duty' 24/7! It might not be fair, but this is a reality that the public believes because we have boasted about it. So, let's talk about social activities. As an officer you are a department leader, part of the management team. Your actions, attitudes, deeds, and words are noticed. Who you are and what you say sets an example for others in your organization. It also impacts the public's perception of your organization. Does your department have a code of conduct? It should. Today it's all about social media. Are you, or are you letting your department be presented online in a non-flattering public image way? Leadership starts with who you really are, what you represent and your basic values that are on display.

On the fireground, as a leader you must remember that your actions *always* speak louder than words. Do you have command/leadership presence and confidence? Is it backed up with real training and skills or is it backed up with bravado? As Volunteers we must realize that this is not a hobby, a club, or a game! We are dealing with real life and death issues when we respond. Emergency scenes are run in a paramilitary way. As such, we must operate within the structured chain of command. We receive orders, acknowledge them, and attempt to meet our tactical objective. Leaders teach their companies to operate as a team, rely on each other, and watch out for each other to get the job done and go home safely. There are many leadership classes you can take and numerous articles you can read and study, but 3 basics of this job are still:

1. You are the crew's supervisor:

- Treat them with respect
- protect them
- convey the tactical assignment and assign the tasks
- Assist with the tasks, as needed
- Lead, direct, and encourage
- keep the IC updated as to your progress with benchmarks (I.E fire knocked down)

2. How you will perform your job is based upon:

- your training and your ability to do the job
- Knowledge of all aspects of the operation
- Leadership and management abilities
- desire and motivation
- physical condition (Yes you read it correctly!)

3. **Build trust with your company members:**

- Know your job
- Be consistent
- Walk the walk, your actions matter!
- Support your people, encourage, coach and mentor
- Remember training, yours, and theirs, is the key to safety and being a great firefighter so attend and participate, with your Company, in all the drills and training you can.

Remember: A good leader understands that you must earn your bugles and the respect of others all the time. Bugles do not make you better than others, people might respect the rank, but do they respect you? As a good effective Company officer, you must always strive to be the very best that you can. Keep current, active, healthy, and safe.

Foundation Stone # 2 Fire Behavior

When I am out teaching officers and firefighters I like to ask this question, "When was the last time you took a good in-depth fire behavior class or opened your FF I/II textbook and read the chapter on fire behavior?" The typical answer, at least 90% of the time, is not since rookie school or basic training! This confounds me. How can we retain what we have learned if we do not keep ourselves refreshed, up to - date and current? Fire Behavior is not just something we need to learn and know to take an FF I certification exam! How can you do your job if you really do not understand basic fire behavior? Do you realize how important fire behavior (and reading smoke, the next Stone) really is? All firefighters need to be well versed in both. Fire Officers need to know it cold! The decisions they make will affect other

firefighters' lives and wellbeing. How can anyone make critical decisions, committing firefighters to an interior attack, if they really do not understand the nature and science of fire behavior? We are talking here about basics that are critical. We need to know **and understand** (2 very different things):

The phases of fire behavior:

- Ignition
- Growth
- Fully developed
- Decay

The basics of how fire spreads:

- Conduction
- Radiation
- Convection

Do you really understand these terms? Can you give examples of each as it pertains to a structure fire?

Using the sun to explain radiation is not putting it into structure fire terms. A company officer leading his company in a burning structure *must understand fire behavior* and how fire spreads in order to do his job of taking them in, and getting them out alive! To understand fire behavior is to be safer, smarter, more capable and a better officer.

What about flashover vs. backdraft? Do you really understand the difference? If I asked you to take a piece of paper and on 1 side write a definition (your own words will do) of Flashover, give me the warning signs and how we prevent it or inhibit, could you? What actions can a company take to survive and what is your chance of survival? On the back of that same piece of paper could you do the same for

backdraft? You need to get it 100% correct, confusing 1 thing such as venting *can and has killed firefighters!*

In recent years there have been very in-depth studies and research conducted by Underwriters' Laboratories (UL) and NIST as regards the effects of ventilation in modern house geometrics and the effects it has on fire behavior. These studies are the future of firefighting. We must open our minds and continue to learn. There have been numerous articles written about these studies and the information is readily available online. I urge you to take a good hard look at these studies. It can and will affect firefighting going forward.

Foundation Stone # 3 Reading Smoke

The ability to read smoke is arguably becoming one of, if not the most important thing we need to observe at a structure fire. Dave Dodson has published an excellent CD series and book with Pennwell Publications on the Art of Reading Smoke. Dodson has retired and has selected Phil Jose to continue this education to the fire service. FireEngineering.com is an excellent place to begin your research and education on reading smoke. I cannot emphasize enough that this process, especially because of modern construction and room contents, is becoming a key element that must be paid attention to.

Being able to read smoke will assist you with:

- Initial actions
- Number of lines and water needed
- Is it a deep-seated fire?
- Heat conditions
- Probable location of the fire

- Flashover probabilities

Furthermore, understanding smoke will help you with:

- assessing venting effectiveness,
- fire containment and/or control and
- is the fire gaining, or are we?

A very important lesson as it pertains to smoke is to remember that smoke is fuel.

The evaluation process consist of 4 key indicators that must be observed:

- Volume
- Velocity
- Density
- Color

Volume will tell you how much fuel is off gassing. You compare the volume of the smoke to the size of the building. Velocity is pressure. We need to look at how fast the smoke is exiting, is it laminar and turbulent smoke? Smoke under a lot of pressure can indicate high heat. Observing different pressures from different openings can indicate where the fire is. Density indicates the quality of burning and the continuity of the fuel. It is an excellent indicator of a potential flashover or backdraft. Color today can tell us many things including the stage of heating, fire extension, and engine company progress.

Being able to read and understand smoke will make you a safer firefighter and officer and keep you more proactive as you anticipate what is happening, what might be going to happen, and by your observations. To really learn and understand this foundation stone will take many hours of studying and

practice. Utilize every training opportunity available to you to acquire this skill! Today's firefighters' lives are depending on you to make the correct decisions.

Foundation Stone # 4 - Decision-making and Incident Action Planning

Decision making on the fire ground happens at all different levels, from the IC to the Company Officer to the firefighter doing the task. What decisions we make at any level can and does affect the success of the operation and the safety and survival of all those operating at the scene. When it comes to this "stone" I need to ask a few questions. As volunteers, what training have we been provided to make these decisions that is realistic to our circumstances and needs? Have you ever taken a class such as fireground strategies and tactics that when you come to the classroom practical exercises it goes something like this:

"As the first due engine company officer you arrive on scene with a full crew (officer and 3 firefighters). Also, responding, and due in moments are 3 additional engines staffed with 4, 2 Truck Company's staffed with 4, 1 Heavy Rescue staffed with 6 and a Battalion chief, a Safety Chief and a Deputy Chief. This totals 33 firefighters. Where I live this would be 3 to 5 alarms for that number of personnel. Perhaps for some of you these numbers might be your staffing level. If so, you are blessed! For the vast majority it is completely unrealistic. We need to train and practice our skills based upon what we can reasonably expect for resources!

At every incident someone has to be in charge and make good command decisions. However, to make good decisions you need to train and practice in a system that is simple, easy to use and very effective. Many times, our first instinct is to pull a line, but have we even looked at the situation yet? What's happening, what's needed and where? To quote Deputy Chief John Sullivan of Worcester (MA) Fire

"What's the plan Stan?" In order to make fireground decisions you must know some basic things that will have a direct impact on any decision you make, they include:

1. The 3 fire ground priorities:

- Life Safety
- Incident Stabilization
- Property Conservation.

(Always remember these, in this order!)

2. What your **on scene** and **incoming** resources are?

3. What are your capabilities?

4. What are the capabilities of your crew(s)?

This is a solid baseline that you must take into consideration. From here we must begin to make decisions and apply actions, but in order to do so you must first identify the problem before you. How can you make a decision if you don't really know the problem? Yes, the house is on fire! But, where, to what extent, occupants trapped or missing, exposures, etc., etc. From the identified problems you begin to plan the actions that must be taken, and finally you implement those actions. This thought translates into what is called a logical thought process. Years ago, I learned this method from a National Fire Academy Program called Multiple Company Tactical Operations (MCTO). It is still great, easy to use and applicable.

The logical thought process is:

- Size - up = Problem Identification
- Strategies and Tactics = Action planning
- Implementation = Assignment of tactics and conversion into tasks

In other words: THINK, PLAN, ACT!

There are a lot of good programs, books, and articles on this subject. Attend conferences and learn. Seek out knowledge on this subject. Our volunteer officers are really not being taught how to make decisions on the fireground, based upon their resources. It's time we start! We as Volunteers need to realize and remember that your decisions, as the IC or a Company Officer, really do matter.

Foundation Stone # 5 - Strategies, Tactics and Tasks

My experiences have taught me that these 3 words seem to confuse and confound many firefighters. But to understand these 3 words will put you in a safe, proactive mode, improve the safety of your fire ground personnel and organize your operation.

I believe that to better understand what all this means we need to go to the beginning and try and simplify it. In learning we must remember that it is easier to always go from the simple to the complex, yet we seem to always want to go right into the complex when it comes to strategies and tactics. By doing so, are we really learning and understanding the subject matter? Probably not.

What is a strategy? According to the NFPA Fire Protection Handbook a strategy involves the development of a basic plan to deal with a situation most effectively. The plan must identify major goals and prioritize objectives. Strategic decisions are based upon an evaluation of the situation, the risk

potential, and the available resources. For many, this simple but formal definition can cause some dismay. "Hey, first you want me to understand friction loss, now this stuff!" Well, the answer is yes to both. It's your job.

There are many other formal definitions but in its most simplistic terms, a strategy is a broad goal. It is where you want to go, the overall plan. Your strategies should be based upon what you are looking at now, WHAT DO YOU HAVE? I suggest that by teaching our officers the basics and going from the simple to the complex that they will gain knowledge quicker and seek to move to the next plateau of learning.

At most incidents you will have more than 1 problem that needs to be addressed and thus more than one strategy. Some examples of **basic** strategies are as simple as: Locate and extinguish the fire, rescue the victims, protect exposures, contain the gas leak, contain the brush fire to the field of origin. Another concept I have been taught is "locate, confine, extinguish". For more complex operations would the strategies become more complex? Yes. But this article is about getting basic officer training for volunteers, not how to develop strategies at an 8-alarm fire in a large city.

What is a tactic and how is it different than a task? If a strategy is where you want to get to, a tactic is how you are going to get there. A tactic is a specific and measurable objective that is necessary to achieve the strategy. It is "what actions" are going to be performed. Examples of basic tactics include fire attack, ventilation, primary search. Remember a tactic is what we have to do, but telling me how to do it is a task. A task is a specific action at the company level that will implement the tactic assigned to the company. It is the "doing part" and where every firefighter wants to go first!

I still hear when listening in on scanner land or in training, many Incident Commanders giving orders as tasks when it should be a tactical assignment.

2 Examples of a task vs. a tactic being assigned by the I.C.

TASK: Engine 2, you, and your crew pull a 1-3/4 line from the rear of E 2, make entry to the second floor, and knock down the fire!

TACTIC: Engine 2, fire attack, second floor

TASK: Ladder 1, you, and your guys take a 24' ground ladder from your truck and a 10' pike pole and open up all the 2nd floor windows on the B side

TACTIC: Ladder 1 horizontal ventilation 2nd floor, bravo side!

Please don't laugh, we all know this stuff is happening every day! If the Incident Commander has to tell each company officer and the crew how to do their job, then I attribute it to one of two things.

1. The crews' capabilities (if they are not capable why are you committing them to an interior attack?)
2. The IC is micromanaging the operation and needs to show confidence in his crews (if they are capable) and learn to give orders as a tactical assignment not as a task

Our volunteer fire officers need to understand what strategies really are and how to formulate good, safe tactics to meet the objective. Again, there is ample information in print form, online and at conferences. Take advantage of these learning opportunities and be the best you can be! But whatever you do, don't over complicate matters, keep it as simple as possible and watch how well it works.

Foundation Stone # 6 - The *Brief* Initial Report

Have you ever been responding to a fire, or listening to a surrounding community responding and hearing the first due company or Chief Officer arrive on scene and say something like this "Engine 1 is off at the scene, working fire!"? Does that work for you? What do they have? Is it the whole house on fire, or is it the 10' x 10' shed in the backyard? It makes a difference to the responding units, does it not? Basically, the brief initial report is "what do I have" and then you share it with all responding units via the radio. This report accomplishes the following:

- It puts the first due officer right into a proactive role
- It forces the officer to look, see and begin to evaluate the situation. It is an initial brief size-up, "what do I have?"
- It forces the officer to begin to act
- It indicates to others responding what the situation is

If you are the company officer in a responding engine or ladder and you hear that we have heavy fire on the 2nd floor and people trapped it will help you to prepare your crew, think and plan what you might be ordered to do (your tactical assignment) and give you a chance to evaluate your crews readiness. If all you hear is "working fire" or "investigating" or even "light smoke showing, investigating" and we never hear anything further, you cannot go into a proactive mode.

The brief initial report should include:

- Off at what address. "Engine 2 off at 12 Oak St" (confirms the address was correct, or corrects it)
- Description of building, "we have a 2-story wood frame building"

- Amount of fire and smoke showing from where, "heavy fire showing, 2nd floor A/B corner". (by the way, "where there is fire there is smoke," so it is redundant to say heavy fire and smoke).
- Report of civilians in peril, "reported occupant trapped on the 2nd floor"
- Immediate exposure problems, "we have an unattached 1 car garaged adjacent B side with light smoke showing"
- Obvious life hazards "electrical wires are down and arcing on the driveway"
- Any other unusual condition or situation that will have an immediate effect on the operation, "we have a 1000' driveway covered with snow and impassible"

Then establish command!

So, sticking to the basics, the above example might sound something like this "Engine 2 is off at 12 Oak St. We have a 2-story wood frame building, heavy fire showing 2nd floor A/B corner and a report of an occupant trapped on the 2nd floor. Engine 2 is Command".

Authors note I have purposely omitted the exposure problem, arcing wires, and snow-covered driveway.

If they were pertinent to the situation, include them. I chose not to over complicate matters here (simple to the complex).

This basic and brief initial radio report will help:

- Prepare all other incoming units (if there are any!)
- Communities that you call for mutual aide and might be monitoring, to begin their mental thought process
- Additional responding units Officers to evaluate their crews and give assignments (You're on the nozzle, you're the irons man, etc.) based upon the information from the initial report

Keep your report brief, simple and accurate based upon what you are looking at right now! We don't need to know what color curtains they have, or if it is vinyl sided. It is lengthy reports that go into great detail that have discouraged people from giving reports. Learn to do it well and then do it at every call!

Foundation Stone # 7 - Size up, initial, and on-going

Size up is a subject that requires a lot of training and skills to truly understand. Basically, it is the ongoing process that evaluates problems and conditions that can affect the outcome of the incident.

Simply put it is:

- What do I have?
- Where is it going?
- What do I have to do to stop it?

There are many books, articles and on-line learning classes that teach size-up. Again, to my point we need to start with the basics and go from the simple to the complex. When we train Volunteer Officers, we need to teach them that size-up happens pre-incident, in-route, initial on scene size-up and on-going size up until the company's are released. I want to be very clear here and tell you that what follows is a primer! Reading this will not make you an expert. Seek out knowledge, study, learn and become the best you can with size up as many lives are counting on you as an officer being able to do your job.

Size-up happens in 3 ways:

1. Pre-Incident

For most of us pre-incident size up should come easily. Do you have pre-plans? They help! How well do you know your town, district, or response area? Do you know where your water supply is coming from for all the different sections of your community? Hydrants, draft, or water tender shuttle? For many of us when we hear the street address, we know the area we are responding to. It might be commercial, residential or McMansions, but we know by the address. We know what mutual aid is available and we know typically what we can expect for a response from our department and from mutual aid departments. All of this is important

2. En-Route

When responding, your size-up will begin with what you know from the dispatcher. What did they report? House fire, barn fire, from an alarm company, numerous calls? You know the time of day and how it might affect different occupancies, and the traffic situation (if you have one!) You know the weather, is it hot or cold? Snow, ice, or rain? All of this could affect the response time and your personnel operating on the scene.

3. On arrival

The brief initial report begins the size-up process. It makes you proactive. After the report you need to begin a more in-depth size up of the problem in front of you. Look at the:

- Nature of the incident
- Location and volume of visible fire
- Look at the smoke, its volume, velocity, density, and color. This is critical!

- What about exposure problems?
- Is the fire involvement with any know, or potential light weight construction?
- Consider the risk to your personnel vs. the gain. Is there anything to save? If not, why are we putting our people at risk?

Size up should be constantly re-evaluated throughout the incident until all companies clear the scene.

Many buildings have fallen down or collapsed after fire containment and overhaul. Don't drop your guard, stay proactive!

There are many different acronyms people use to help with size up. Which one is the best? You decide because it needs to work for you. The four I have seen most often are:

- **WALLACE WAS HOT**
- **COAL WAS WEALTH**
- **RECEO VS**
- **SLICERS**
- **SSLEEVES**

What each acronym means follows.

WALLACE WAS HOT

Water	Exposure
Apparatus/personnel	Weather
Life	Auxiliary
Location/extent	Special hazards
Area	Height
Construction	Occupancy

Time

COAL WAS WEALTH

Construction

Area

Occupancy

Location and extent of fire

Apparatus and manpower

Time

Life Hazard

Height

Water Supply

Auxiliary appliances

Street conditions

Weather

RECEO VS

Rescue

Exposures

Confinement

Extinguishment

Overhaul

Ventilation

Salvage

RECEO VS is probably the most well-known.

SLICERS

SLICERS was developed by the ISFSI (International Society of Fire Service Instructors) and is based upon the new fire science that was developed by NIST and NIST

Size up all scenes

Locate the fire

Identify and control the flow path (if possible)

Cool the heated space from a safe location

Extinguish the fire

Rescue (actions of opportunity any time)

Salvage

SSLEEVES

This is an acronym that has roots in Massachusetts. It is the one I have personally used and teach when training new or inexperienced officers. I find that it works logically and covers the basics. Does it cover everything as thoroughly as the other 2 options? No, it does not, but it is a great start and very easy to use. I've taken the acronym and divided it into 2 parts: 1) the thinking phase and 2) the planning and acting phase.

The thinking phase:

Size up initial and on-going

Sufficient help?

Life Hazards?

Exposures?

Basically, this is the "what do I have and where is it going?" phase

The planning and acting phase:

Entry

Ventilation

Extinguishment

Salvage

This phase covers "how am I going to stop it"?

The 360 RECON

While on the subject of the size-up, if you are the Incident Commander you must remember that what you see from where you are standing might be very different if we were looking at the rear. How can you conduct a size-up and make logical decisions without seeing all 4 sides of the building? Have you ever been on a fireground where "surprises" were found? I know I have many times. Look around, it takes just a few moments. On arrival you should be seeing 3 sides, and a quick trot down the B or D

side will give you a visual of all 4 sides. If you cannot get around the building due to its size use the eyes of your Safety Officer, or Sector or Division Chiefs to gain the valuable information you need.

The question here is not which one of these size up acronyms is better, but rather which one will you choose to use, and use often? They are all designed to assist you as an Officer and as the IC. Hey, wait a minute, I thought this was about training company officers?! It is, however, any company officer could be first due and have to start the operation making critical and potentially life altering decisions, so you better have a system to assist you.

Size up is not just for the IC! Every Company Officer should be conducting their own size up, initial, and on-going. Look at what you are entering, observe conditions while operating! Listen to reports on the radio from other companies and think how and if they could affect you. You are an Officer responsible for your crew's safety and survival, be proactive!

Foundation Stone # 8 Building Construction for the Fire Service

We read and hear all about building construction, but do we really understand its impact and danger to us? I still cannot, after 48+ years, understand why people are so afraid of learning and understanding building construction as it relates to the fire service. It is ironic but if I ask people what dangers we have to watch out for as regards building construction I typically hear either balloon construction or light weight truss. Both are good answers but what about all the other stuff? Firefighters' lives depend on you having a working knowledge, at least the basics.

I think the basics of building construction are knowing the 5 classifications:

- Type 1 - Fire resistive
- Type 2 - Non-Combustible
- Type 3 - Ordinary
- Type 4 - Heavy Timber
- Type 5 - Wood Frame

Now depending on where you are located and what your mutual aid response area is, many of us can face all 5 classifications! For other volunteer organizations we might only see 4 (types 2, 3, 4 and 5). But regardless of where you are you must know the basics of building construction for your response area.

We also need to know the following for each classification:

- How is it built?
- How does it burn?
- How does it fall down

How is it built?

You need to understand what it is built of and how it is constructed. Is it wood, steel, masonry, or a combination? How will this be affected by fire? Learning about how it is built for all 5 classifications will give you a good solid core of understanding the building. You need to learn the strengths and weaknesses of each classification as it regards us as firefighters. Things like cocklofts, parapet walls,

steel directly exposed to heat and fire and when it will fail (hopefully with you not under it). All of this is key information to be proactive and safe.

How does it burn?

With each classification the fire will behave differently. How will the fire spread and what affects its path of travel? You need to understand how the type of construction will inhibit or spread the fires travel. The classic example is of course balloon construction. Each classification needs to be understood. A type 3 building will have cocklofts and possibly shared pockets in the masonry walls allowing fire to spread. Fire will behave differently in a Type 5 platform constructed building than it will in a Type 4 Heavy timber. You must understand these basics.

How does it fall down?

How often do we hear people talking about the collapse zone and then at a fire, totally ignore the cautions? The collapse potential is not just the walls and parapets falling on you. It also includes, but not limited to, a floor of lightweight construction burning and collapsing under your weight, the roof rafters that are truss collapsing while you are trying to cut a vent hole. If you need verification review some of the OSHA LODD reports.

A competent fire officer needs to have a solid understanding of building construction and how it relates to the fire service. Learning about this subject is not a read an article or watch something online and become an expert. You must spend many hours reading, studying, and taking classes and seminars. Failing to do so is a potential disaster in the making. Maybe it's time we pay more attention to this subject. There are many books, online classes and seminars that deal with this subject, be proactive and be safe!

Foundation Stone # 9 - Risk Management and Assessment

This stone is one of the most important yet frequently ignored foundation stone. How often have we seen firefighters taking risks that are not necessary? Yes, firefighting is a risky and dangerous job, but it should be a calculated risk! As volunteers you put a lot on the line every time you enter a burning building. If everything went wrong and you died what happens to your family? Does your community have an insurance policy that would give death benefits or survivor benefits that is consistent with what you earn in your full-time job? For most of us the answer is no. Our families and survivors could be left to the generosity of the community at large, and you cannot always depend on this. I am not suggesting that we all become frightened of our job or terrified to make entry! We signed up for the job, and we should realize the dangers and possible outcomes. However, the risks we take should be calculated and based upon solid information. We need to consider the situation we are looking at the risks its presents, the capabilities of the firefighters standing before us, and do their capabilities match the action's needs. What about your personal capabilities, are you truly prepared and ready?

The decisions you make as an officer do matter, and do affect the lives of other firefighters.

Some of the terms we hear regarding risk are:

- Risk/Benefit Analysis
- Risk Management
- Situational awareness
- Survivability Profile

Each of these is different.

Risk/Benefit analysis is usually simply stated as "is the risk worth the benefit or gain"? We should be taught to "risk a lot to save a lot and risk a little to save a little". This is sage wisdom and we must think like this! Do your officers have the knowledge and capabilities to make this type of critical decision?

Risk Management is clearly spelled out in many NFPA Standards including 1500, 1561 and 1521. They state that "activities that pose a significant risk to members shall be limited to situations when there is a potential to save endangered lives. Activities that we routinely use to protect property shall be recognized as a risk to the safety of the firefighter". *In other words, firefighting activities.* The NFPA goes on to state that "no risk to the safety of our members shall be acceptable when there is no possibility to save lives or property. In situations where risk to the members is excessive, activities shall be limited to defensive operations". As you read these words think about what they mean. We should not be taking foolish risks to save a body, or worse a building.

Situational Awareness is something that every officer and every firefighter should always be observing when operating at an emergency scene. A company officer is expected to maintain a continual awareness of his company's assignment, the progress, or lack of progress they are making and the overall situation around them. You must remember that current conditions will change either for the good or for the bad. The company depends on the officer to observe the conditions and have the skills and knowledge to understand what is happening around them. Your ability to maintain a situational awareness can and has saved countless firefighters lives.

Survivability Profile is a skill we must use when getting ready to commit firefighters to a rescue situation. All too often the life at risk has long perished, the building is overwhelmed by fire, and we have too few resources on hand. To risk a crew of firefighters to save a long-expired civilian is questionable. When you make a survivability profile you must apply common sense. What are the smoke and heat conditions? How much fire do you have and how long has it been burning? Is the victim in the room of

origin and it has been free burning for some time now? When making these types of decisions don't apply emotion! Honestly, ask yourselves is the person still alive? And then ask yourselves are the firefighters standing here right now capable of entering and getting back out alive? (this is a matter of training and skills, remember all those drills they did not show up for?). Hard questions and even harder answers, but lives count on you making the correct decision.

A good officer must possess the knowledge, skills, and ability to make tough decisions. Your members' lives depend on you choosing the correct one!

Foundation Stone # 10 Accountability and Crew Integrity

Does your department have a good, workable accountability system? Is it used at all calls? As Volunteers we have no idea who will show up to a call. Discussing and presenting accountability systems is in itself a stand-alone class. The information presented here is to make you aware of what is needed. A structured accountability system is something we must have at all operations. The system needs to be simple to use and very functional. When teaching, I often ask students what accountability means to them. Every time, they describe their system of "tagging in". In other words, accountability to them means tags and tagging in. But I suggest we first look at the word accountability and understand what the word accountability actually means. It is defined as "to be accountable for one's own actions". (This means you can't blame it on someone else!) I believe that in order for any system to work and be effective all members must understand that their actions and decisions matter and can affect us all. It must also be understood that they will be held accountable for freelancing activities, not following orders, or abandoning the company.

In order for an accountability system to really work all Officers must

- understand the system
- use the system as intended, always
- Enforce its use with your company
- set the example.

When it comes to accountability all members must realize that they need not even bother to offer excuses about why they do not have a system, or worse do not use the department's system in place, **because none will be accepted!**

The primary purpose, in my opinion, of an accountability system is to provide the IC with accurate and useful information if something goes wrong. The system really needs to tell me:

- What companies are operating in, on, under or around the building
- What their assignment is and where they are working
- Number of members with each company

This information is the basics we need. We don't really need your blood type, religion, shoe size or if you like long walks on the beach!

If we get a mayday, company lost, collapse, or rapid fire spread this type of pertinent and accurate information will help direct the rescue and RIT efforts. It will assist the IC with finding out how many are in danger and give clues as to where we can begin the rescue/RIT efforts.

A simple, workable, **and used** accountability system can save firefighters' lives!

Within the accountability conversation we need to also discuss Crew Integrity. Fireground priority # 1 is Life Safety and our lives are first. Statistically about 82% of LODD's with fire suppression activities involved those of a single firefighter. Many became lost or disoriented and died before their officer or the IC even knew they needed help. To maintain Crew integrity every Company Officer must know the location of every member of his crew. He must also instill discipline within every member of the Company, in order for all to understand why crew integrity is important and maintained.

All Officers have a moral and ethical obligation to maintain accountability and crew integrity.

Wrap Up

I hope that what I have presented here has made you more aware of why we as Volunteers really need to improve our company officer training. Please remember that the 10 foundation Stones are presented at an awareness level. It is up to you to go and seek out the intense education and knowledge needed to become a great and safe officer.

To help you in your ongoing education I suggest you might start with going to the NIOSH web site and

reviewing some of the LODD reports. For a starting point I would like to suggest the following:

F2012-08

F2009-07

F2008-08

F2011-15

F2008-34

F2011-02

F2008-26

The purpose of reviewing these is not to open old wounds or bring dishonor or sadness to any department. Nor is it to Monday morning quarterback. Rather it is to help all of us open our eyes and learn that you need to know, understand and learn from our past history, or we are doomed to see it repeat itself.

Company Officers who seek out knowledge and skills will set the standards for the future. Think about how you can help your own department by setting a training example and embracing the concept that training is the key to professionalism and safety on the fire ground!

Be trained, be capable and be safe!

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