



Golden Valley Fire District

Daily Quick Drills

Volume 1, Numbers 1-10



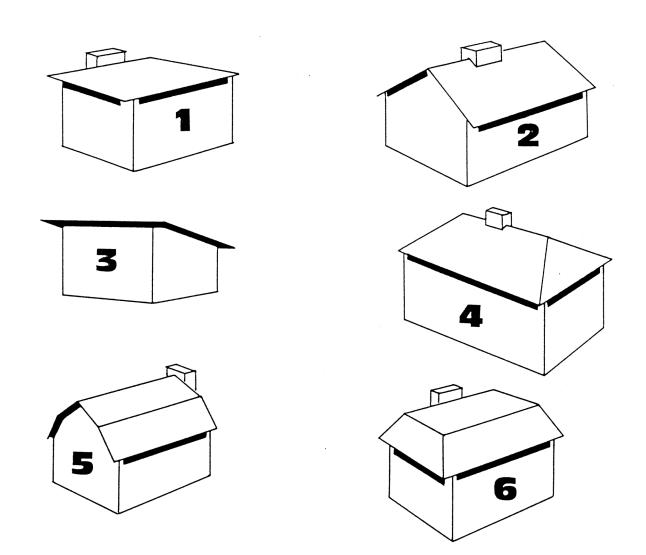
The daily quick drill is designed to assist the company officer in delivery of a quick review of a department policy or procedure. Reviews of basic fire-fighting, ems and special response situations should be referenced to appropriate SOG's.

- Quick Drill Subjects
- Roof Styles
- Hoseline Lengthening
- Pump Cavitiation
- ERG Books
- Magnesium Fires
- Bowline Knot
- Ventilation Decisions
- Overhead Garage Doors
- Building Construction Terms
- EMS Load and Go!



Roof Styles

-Can you name these common roof styles?
-What are some laddering concerns for each structure?
-Can you identify at least one of each of these styles in your still district?





Volume 1, Number 2

Building Const. Terms

Refer To: <u>Building Construction For The Fire Service</u> PAGES 16 through 22

Review:

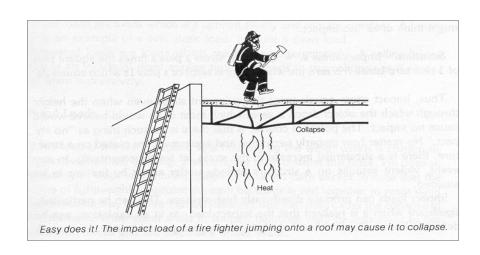
DEAD LOADS – The weight of the building itself and any equipment permanently attached.

ADDED DEAD LOADS – Example would be new air handling equipment.

LIVE LOADS – Any other load added to structure such as furniture or storage.

ADDED LIVE LOADS – Example, a 600 gpm master stream will add 25 tons of added live load to a structure in 10 minutes.

IMPACT LOADS – You may be an impact load, or a load the structure was not originally designed to take.



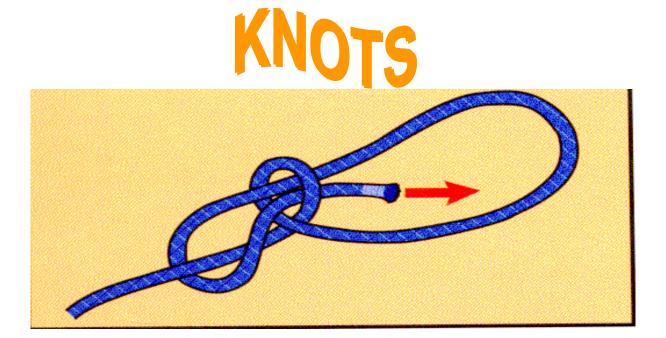


Volume 1. Number 3

Bowline Knot

Refer to Essentials of Firefighting, 3rd edition.

Read page 117, The Bowline Knot



Practice It

What are some uses for this knot?



Volume 1, Number 4

Cavitation

<u>Cavitation</u> is when the pressure in the pressure in the pump suction drops below the vapor pressure of the water being pumped, vapor bubbles or vapor cavities form at the suction inlet to the impeller(s) and the vapor cavities are collapsed in a fraction of a second as they pass into the impeller and are subjected to its pressures.

This implosion or violent collapse of the vapor cavities is most pronounced near the leading edge of the impeller vanes where the vacuum is highest, which is usually the point of lowest pressure.

The result of these implosions is progressive damage to the impeller, **as each implosion breaks away a small particle of the impeller.** As the damage is cumulative, continued operation of the pump under conditions producing cavitation will cause eventual impeller failure.

Cavitation is produced under several conditions:

- 1. When the lift (at draft) is too high for the volume and pressure being discharged.
- 2. Suction hose too small for the volume being discharged.
- 3. Restriction in suction line at strainer.
- 4. Partial collapse of lining in suction hose.
- 5. Temperature of water being pumped is too high.

The remedy for each of these potential causes of cavitation are:

- 1. Reduce the volume or pressure of discharge.
- 2. Use larger suction hose; shorten total length by removal of one length, if possible; or reduce volume of discharge.
- 3. Remove weeds or debris restricting entrance of water at the strainer.
- 4. Replace suspected section of suction hose for testing after return to quarters.
- 5. Reduce volume discharged unless another water source of cooler water is available.

Cavitation can usually be determined by the sound emanating from the pump while operating. If the pump sounds as if many **small stones were passing through** with increased vibration, cavitation usually exists.

A quick check can be made by watching the discharge pressure gage while slowly opening the engine throttle. If there is an increase in engine speed without a corresponding increase in discharge pressure, the pump is at the "run-away" point and is cavitating.

The throttle opening should be reduced to the original pressure setting and action initiated as outlined.



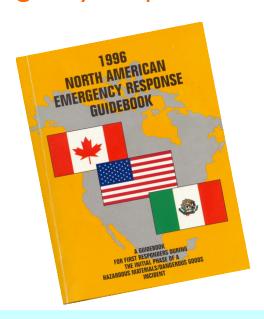


Volume 1, Number 5

Hay Mat E. R.G. #1



Refer to: Emergency Response Guide



Look up Methyl Vinyl Ketone

- * Why is this substance highlighted?
- * What does the P indicate next to the guide number?
- * On a large spill what is the distance you should <u>first</u> isolate in all directions?



Volume 1, Number 6

Hoseline Lengthening



HANDLINES

Your preconnected handline comes up short

"Bummer"



As a company, review options for a extending line.

Company personnel can practice size-up for determining proper apparatus placement, and proper length of lines.

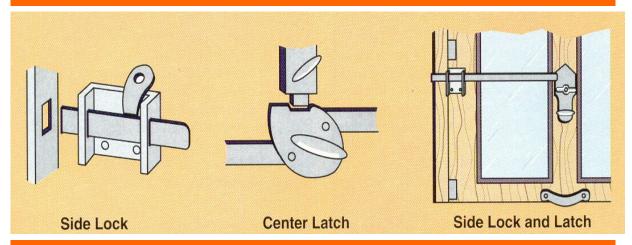


Volume 1. Number 7

Overhead Garage Doors

Overhead Doors

Refer to Essentials page 192-193. Review overhead doors. Examine the different types of locking assemblies and possible entry routes.



How are these doors best accessed?

How can you safely block these doors from closing behind you?

Name the types of overhead doors that are common in your still district.

What forcible entry tools will best accomplish opening these doors?

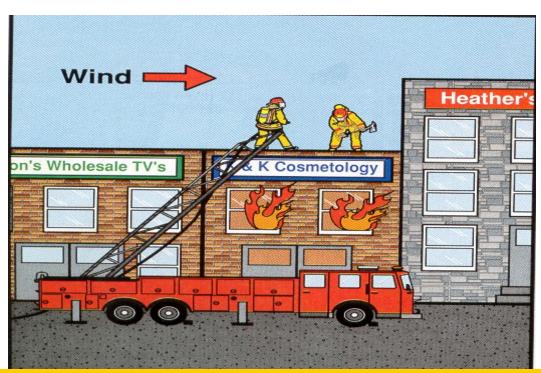


Volume 1, Number 8

Ventilation Decisions



Please refer to *IFSTA Essentials*.
Read "*Selecting The Place To Ventilate*",page 217



Use caution when venting next to an exposure that is taller than the fire building.

What direction is the wind from today?

Is horizontal ventilation affected by wind speed/direction also?



Review IFSTA Hazardous Materials Manual or other HazMat Reference



Using water on combustible metal fires, such as the magnesium engine in this car, poses a threat to first responders.

What are some alternatives for extinguishing such fires?



Volume 1. Number 10

Load and Go

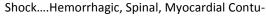
When is it time to LOAD and GO?!

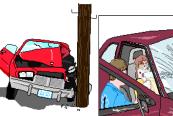
Load and Go traumatic situations are critical injuries which may require prompt surgical intervention to save the patient. If the patient has one of the traumatic conditions below the EMS team should:

- Apply Oxygen (high flow) and Rapid Full Spinal Immobilization
- There are a few procedures that are briefly done at the scene: Manage airway, control major bleeding, seal sucking chest wound, hand stabilize flail chest segment, decompress tension pneumothorax, CPR
- Load into the Ambulance
- Transport rapidly to the nearest appropriate emergency facility (a Level 1 Trauma Center if possible)
- Continue with Advanced Life Support Procedures enroute

Injuries which makes the transport decision a Load and Go:

- 1. Airway obstruction unrelieved be mechanical methods (ie, finger sweep, suction, forceps, abd. thrusts)
- 2. **Breathing** inadequately: Sucking Chest Wound, Large Flail Chest Tension Pneumothrorax, Major Blunt Chest Injury.
- 3. **Circulation** sion, Pericardial Tamponade
- 4. Traumatic Full Arrest
- 5. Head inj. with Decreased LOC
- 6. Signs of conditions that **Rapidly** Lead to Shock:
- Tender, distended abdomen
- Pelvic instability
- Bilateral Femur Fractures







- In certain circumstances, a patients condition may require the EMS Team to abbreviate or eliminate certain procedures
- The decision to deviate from SOPs must be documented thoroughly
- This Load-and-Go Situations SOP does not imply that the rate of speed of transport is accelerated, but rather, there is emphasis on rapid patient packaging and limiting on-scene time (barring prolonged extrication).
- Any deviation from SOPs must be based on the medical decisions of the paramedic treating the patient.

DESCRIPTION: This JPR Training Guideline follows the format identified in NFPA 1001, Standard for Firefighter Professional Qualifications 1997 Edition. Knowledge, skill, performance and topic description are referenced from the Certified Firefighter II & III Instructor Reference Manual developed by Illinois OSFM. Other materials are referenced as needed.

JPR Duty Area : <u>Prevention, Preparedness, Maint. (FF3)</u> Subject: <u>Prefire Planning (Bldg.</u> Const.)

<u>Job Performance Requirement</u>: Prepare a preincident survey, given forms, necessary tools, and an assignment, so that all required occupancy information is recorded, items of concern are noted, and accurate sketches or diagrams are prepared and the firefighter has an understanding of the effects of fire on various types of building construction features.

OSFM#	Skill / Knowledge / Performance / Topic Description	NFPA#	Standard	Validated
3-15.6.	Identify the procedures for preparing a pre-fire plan.		Pass/Fail	
3-15.20	Demonstrate preparation a pre-fire plan that includes diagrams or sketches of a building to record the location of items of concern. (4-22.1)	4-22.1	Pass/Fail	V
3-16.4, 5, 6, 7, 8	Identify types of floors, doors, windows, roof, and the construction features of various types of buildings: mobile homes, prefab. Const., modular, geodesic dome, log homes, agricultural type buildings, ordinary, fire resistive, noncombustible, lightweight, etc.		Pass/Fail	

GENERAL TASK STATEMENT:

 Complete prefire surveys with attention to building construction characteristics and the possible effects of fire on those building construction features

Prerequisite Knowledge	Prerequisite Skills
Categories of building constructionConstruction features in common structures	Sketch requirementsDetect hazards and special considerations
 Utility identification 	Detect nazarus and special considerations
 Department preplan procedures 	

- 1. Complete prefire surveys of assigned buildings with attention to building construction features.
- 2. Complete appropriate paperwork per department procedures.

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JPR Duty Area: General FF 1 Subject: Protective Clothing

<u>Job Performance Requirement</u>: Given the components of personal protective clothing, the firefighter shall don the entire set of clothing in accordance with manufacturers instructions within one minute so that all components are properly in place; doff personal protective clothing are

prepare for reuse.

OSFM#	Skill / Knowledge / Performance / Topic Description	NFPA#	Standard	Validate
2-7.14	Demonstrate the donning and doffing of protective clothing issued to firefighter	3-7.3	Pass / Fail	√
2-7.15	Demonstrate the use of seat belts, noise barriers and other issued safety equipment	3-3.7	Pass / Fail	
2-7.19	Identify the components of the personnel accountability system—Each firefighter shall have nametags and apparatus helmet shield for unit assigned	3-3.2	Pass / Fail	
	Conduct Inspection of all components of personal protective clothing for wear and/or breakdown		Pass / Fail	
	Wash all clothing components of Personal Protective Clothing, document serial numbers of piece and date is was laundered		Pass / Fail	
	Identify the Components of each part of the garments, and review the materials of manufacture, its specification, how it protects, and how it can deteriorate		Pass / Fail	

GENERAL TASK STATEMENT:

 Firefighter shall demonstrate the ability to correctly don all components of personal protective clothing

Prerequisite Knowledge Components of Personal Protective Clothing Donning sequence of Personal Protective Clothing	Prerequisite Skills Proper donning and doffing
 Knowledge of proper cleaning methods 	

- 1. Ability to don personal protective clothing in one minute or less.
- 2. Identify damage or conditions that may cause P.P.C. to be unsafe for use.

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JPR Duty Area : General FF 1 Subject: SCBA Donning & Maintenance

Job Performance Requirement: Given an SCBA and full personal protective clothing, the firefighter shall don the SCBA unit without errors in the sequence defined by manufacturer recommendations so that all safety checks are completed, air seals are not compromised, so that air flow reaches the facepiece and that PASS device is activated in less than 60 seconds.

OSFM#	Skill / Knowledge / Performance / Topic Description	NFPA#	Standard	Validated
2-4.7	Demonstrate SCBA in safe condition for immediate use	3-7.10	Pass / Fail	
2-4.8	Demonstrate cleaning and sanitizing of SCBA	3-7.16	Pass / Fail	
2-4.9	Demonstrate daily inspection procedures for SCBA		Pass / Fail	
2-4.6.1	Correctly don SCBA unit while wearing protective clothing in accordance with SOG. This shall include coat, pants, hood, gloves, helmet in 60 sec. or less. Time will be evaluated from start of donning sequence to activation of air flow and bypass valve operations check.	3-7.9	Pass / Fail	✓
2-4.6.2	Correctly <u>doff SCBA</u> unit while wearing protective clothing in accordance with SOG. This shall include coat, pants, hood, gloves, helmet. 2-4.6.2	3-7.9	Pass / Fail	
2-7.7g	Once SCBA donned without errors, <u>activate PASS device</u> with gloved hand: 1. Auto Position 2. On Position	3-7.1	Pass / Fail	✓
2-4.15, 16	Demonstrate changing air cylinders 1. One person on ground/flat surface 2. One person on back of another ff 3. Perform #1 with vision obscured	3-7.15	Pass / Fail	✓

GENERAL TASK STATEMENT:

- Firefighter shall demonstrate the ability to properly don a functioning scba unit utilizing all protective clothing and safety equipment issued to firefighter in 60 seconds or less.
- Firefighter shall demonstrate routine maintenance and inspection procedures for scba unit
- Firefighter shall demonstrate the ability to change air cylinders in a variety of situations
- Firefighter shall complete annual facepiece fit testing as defined by a/h/j

Prerequisite Knowledge

- · Components of personal protective clothing
- Parts of scba unit
- Operation of scba unit
- Care and maintenance of scba components

Prerequisite Skills

- Ability to identify components of personal protective clothing
- Cleaning and servicing of scba components

- 1. Don SCBA in 60 sec. or less in full personnel protective clothing
- 2. Activate PASS device to ON position with gloved hand.
- 3. Change air cylinder on back and on the ground.
- 4. Complete annual facepiece fit testing.
- 5. Perform routine care and maintenance of scba unit.

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JPR Duty Area: Fireground Operations Subject: SCBA MODULE B

Job Performance Requirement: Use SCBA during emergency operations given SCBA and other personal protective equipment, so that the SCBA is properly donned and activated within one minute, the SBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

OSFM#	Skill / Knowledge / Performance / Topic Description	NFPA#	Standard	Validated
2-4.12	Demonstrate the use of all parts of SCBA while in obscured vision area	3-7.11	Pass / Fail	
2-	Demonstrate rescue procedures	3-7.17	Pass / Fail	
4.17.1,2,3				
	Complete toxic bottle change		Pass / Fail	
	Demonstrate emergency escape procedure using quick fill option (if		Pass / Fail	√
	equipped) with buddy firefighter			
	Assume stricken firefighter position			
	Assume rescue firefighter position			
2-	Demonstrate emergency procedures used in the event of SCBA failure	3-7.13	Pass / Fail	√
4.13.1,2,3	By-pass or purge valve			
	2. Conservation of air			
	3. Breath from tube, regulator and facepiece			

GENERAL TASK STATEMENT:

- Demonstrate advanced scba skills in simulated hostile environments.
- Complete scba confidence course utilizing a variety of operational skills.

Prerequisite Knowledge	Prerequisite Skills
 Breathing techniques 	 Ability to control breathing to maximize air supply
Emergency procedures	 Use scba to exit through restricted passages Emergency procedures in the event of SCBA failure or air depletion Complete donning procedures

- 1. Perform advanced procedures in SCBA and protective clothing
- 2. Demonstrate proficiency with SCBA unit and all components of SCBA system.

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JPR Duty Area: General FF 1 Subject: Self Survival Skills Module A

Job Performance Requirement: The firefighter shall perform the techniques necessary to escape a hazardous environment using basic skills, equipment and procedures so that the firefighter is able to retreat to an area of safety

without compromising scha integrity or loosing contact with rescue crews or partners

OSFM#	Skill / Knowledge / Performance / Topic Description	NFPA #	Standard	Validated
2-7.13	Demonstrate techniques for action when trapped or disoriented in a fire situation or hostile environment	3-3.4	Pass / Fail	✓
2-4.12	Perform the following life-saving functions in a simulated zero visability situation: (mask covers) All evolutions must be performed in FPG	3-7.11	Pass / Fail	√
2-4.6.1	Don SCBA from ground in coat and overhead method	3-7.9	Pass / Fail	✓
	Doff SCBA from back in coat and roll-over technique without breaking facepiece seal		Pass / Fail	√
2-4.13	Demonstrate activation of BYPASS valve on SCBA facepiece	3-7.13	Pass / Fail	✓
	Activate PASS device and reset after 10 seconds		Pass / Fail	✓
	Identify the male/female couplings of a hose and indicate direction of travel for safety		Pass / Fail	✓
	Given a length of rope or webbing, tie a handcuff knot around your wrists so that fellow firefighters can remove you from grade rescue		Pass / Fail	√
2-8.6.1	Given a length of rope or webbing, tie a bowline around your waist so that fellow firefighters can remove you from below grade	3-10.1	Pass / Fail	√
	Demonstrate the ability to perform a quick-fill manuever into your SCBA		Pass / Fail	✓
2-16.5	Utilize portable radio to communicate MAYDAY situation	3-4.5	Pass / Fail	✓

GENERAL TASK STATEMENT:

Demonstrate the ability to escape life threatening situations using standard personal protective equipment

Prerequisite Knowledge

- SCBA parts and uses
- Parts of hose couplings
- Radio and communication procedures
- Self survival procedures for trapped firefighters

Prerequisite Skills

- Use of bypass, quick fill adapter (if present)
- Dumping and donning techniques
- Coupling identification
- Construction of basic knots
- Use of portable radios
- **PASS** Device operation

- 1. Don SCBA from ground with blacked out mask.
- Doff SCBA from your back to ground using a roll over technique without breaking seal.
- 3. Activate PASS device to ON position
- 4. Operate bypass valve to clear facepiece.
- 5. Identify male/female couplings of hoseline and use to determine way out of building.
- 6. Tie handcuff knot in rope or webbing and place onto wrist for rescue.
- 7. Tie bowline knot around your waist.
- 8. Perform guick fill with 2^{nd'} SCBA unit (for SCBA's equipped with guick fill)
- 9. Demonstrate MAYDAY radio procedures on portable radio.