

Division 12

April 2023 – Water drill

Host: Villa Park Fire Department

Date: April 21st (Black)

Time: 0900-1200

Topic: Swift water- Shallow water crossing, Y- directional, task groups

Description:

Members of the water team will review the drill outline and objectives before donning appropriate PPE and performing skills listed below. We will function in a manner that would mimic operations at a real response.

Contact:

Todd Gutzmer – Villa Park Fire Department

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Location:

Graue Mill

3800 York Rd

Oak Brook, Il 60523

DIVISION 12 WATER DRILL
LESSON PLAN

Lesson Title: Swift Water drill	
Level of Instruction: Division response-Level Training	
Method of Instruction: Classroom and Hands-on	
Learning Objective: Learning Objective: The student(s) will be able to 1) Organizing into response groups. 2) The student(s) will be able to demonstrate the proper way of performing a shallow water crossing. 3) The student(s) will be able to demonstrate the proper way of setting a up a Y-Directional.	
References: NFPA 1670,	
Location: Graue Mill 3800 York Rd. Oak Brook, il 60523	
Time / dates: 0900-1200 April 21 st 2023	
Instructor: Todd Gutzmer	
Materials Needed: Stokes basket, RDC, 2 rope bags, Swift suit ensemble, waterproof radios and group identification material (colored duct tape, colored lights)	
Safety Hazards / Identification: Water current, strainers, water temperature/hypothermia	
Step #1 Lesson Preparation: <ul style="list-style-type: none"> • The instructor will review and present Swift Water drill objectives. • Instructor will discuss and students will practice setting up response groups. • Instructor will set up a suitable area with a target for students to practice deploying shallow water crossing. • Instructor will set up a suitable area with a target for students to practice deploying a Y directional. 	
Step #2 Presentation: Cognitive: Review the Swift Water Objectives. Practical application: <ul style="list-style-type: none"> • The team shall Demonstrate setting up response groups mimicking a real response. • Each member of the company shall demonstrate the effective use of a shallow water crossing following the steps outlined below. • The team shall demonstrate the setup of a Y directional as outlined below. 	Step # 3 Application: Division 12 Water rescue team – swift water operations IDOL – Special Hazards Training NFPA 1670 – 17.1, 17.2, 17.3 NFPA 1006 – 18.1, 18.2, 23.1, 23.2 OSFM Surface Water Ops - 17.2.01 Develop a site survey, 17.2.02 Select water rescue PPE, 17.2.06 Deploy a water rescue rope, 17.2.12 Support operations, Rope Rescue - 6.1.03 Construct a multiple-point anchor system, 6.1.04 Construct a compound rope mechanical advantage system, 6.1.06 Direct the

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	operation of a compound rope mechanical advantage system
Step #4 Evaluation: SWBAT (Student will be able to) successfully demonstrate the abovementioned skills. The instructor shall complete a Target Solutions assignment acknowledging that all participants have completed the skills reviewed.	

Setting-up/Forming response groups

Rescuers will form response groups responsible for completing tasks at an incident. Each group will have a designated leader who will remain in contact with incident command/operations. Each group will be large enough to perform the assigned task.

Groups will have visual identifiers (colored duct tape) with their name written in marker.

These Groups will gather and transport all necessary equipment to complete assignments.

Groups will utilize Motorola waterproof radios on designated channels to communicate with each other/Command.

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Shallow water crossing

Rescuers will face upstream while carrying a stokes basket. The leader of the exercise will direct the team where and when to move. The team shall move in a coordinated manner reaching the opposite shore before switching roles and returning to starting point.

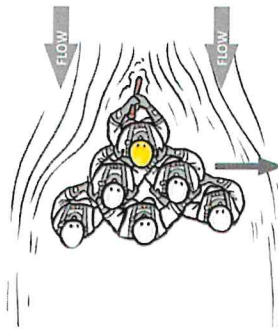
Steps to perform shallow water crossing:

1. Identify leader of exercise group.
2. Position members for exercise with larger members upstream.
3. Consider utilizing pike pole or stick to feel area ahead of team.
4. Call out movement in steps (example "Left" "Upstream" "Downstream" Etc.) moving one step at a time.
5. Reach victim/target and put victim in basket.
6. Return to starting point.

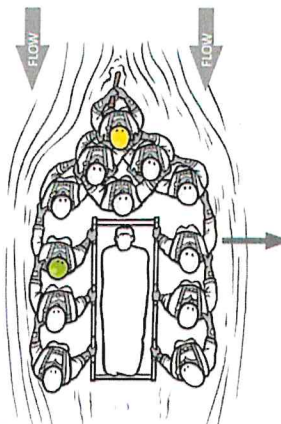
Tips:

- NEVER tie anybody to basket
- Bring PFD for the victims.
- Scout river for best place to cross.
- Have stable footing and balance before you advance.
- Switch arms/sides to prevent fatigue.

The wedge is a solid option for a team to cross, and can be used to support an injured person in the center where they are sheltered and supported. The shape uses the rescuers' bodies to protect and shelter the litter basket held in the center.



Patients must not be tied into the litter basket for in-water operations. If the victim requires immobilization (in the case of a suspected spinal injury), then hands on stabilization or a different option should be used for safe evacuation. Use a PFD on the patient when transporting across the water.



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Deploying a “Y” directional

Step 1 – Get a team with rope across the river: This can be accomplished in many ways by tech level operators. The running end shall remain on near shore and have a pulley connected to the end.

Step 2 – Anchor the rope: Once the rope is across the river, the team should find a suitable area for them to hold and work the rope.

Step 3 – Connect RDC or tethered rescuer: Utilizing a second rope (reeved through pulley connected to first rope) connect to bridle of RDC or tow tether of rescuer.

Step 4 – Tension the first rope to set position across the river: Tensioning the far shore rope will set the position across the river. The first rope will continually need to be adjusted to keep position correct.

Step 5 – Adjust second rope to lower and raise RDC/Rescuer to victim and retrieve them:

Slacking and hauling will lower and raise RDC or rescuer. Ensure good control of rope.

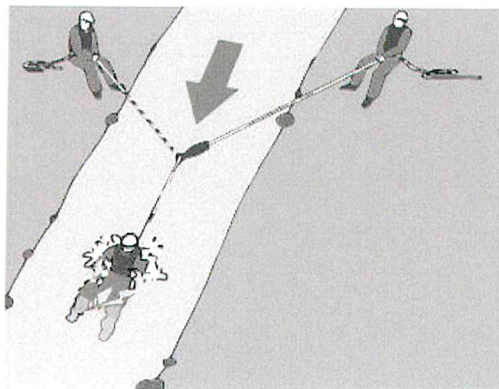
Step 6 – Follow direction of rescuers to correct their position: Rescuer/RDC Operator will use hand signals or radio to direct rope teams to correct their position in the water. (Example: “Left” means rescuer’s left, “downstream”, “Right” means rescuer’s right, “Upstream”).

Step 7 – Return RDC/Rescuer w/ victim to near shore: Tension both ropes bringing craft/rescuer w/ Victim upstream. Then tension second rope (near shore) and slack first rope bringing equipment and personnel to near shore.

Tips:

- The faster the current the more personnel required to manage ropes.
- Designate team leaders for each group (near shore, far shore, rescue)
- Bring PFDs for victims.
- Have downstream safeties
- If failure occurs secure second rope to stationary object and craft/personnel will pendulum to near shore when first rope is slacked out

In a Y lower, only one rope is attached to the rescuer’s harness. Another rope from the opposite bank is clipped to this, allowing the rescuer to be moved around the river channel.



Y lower setup

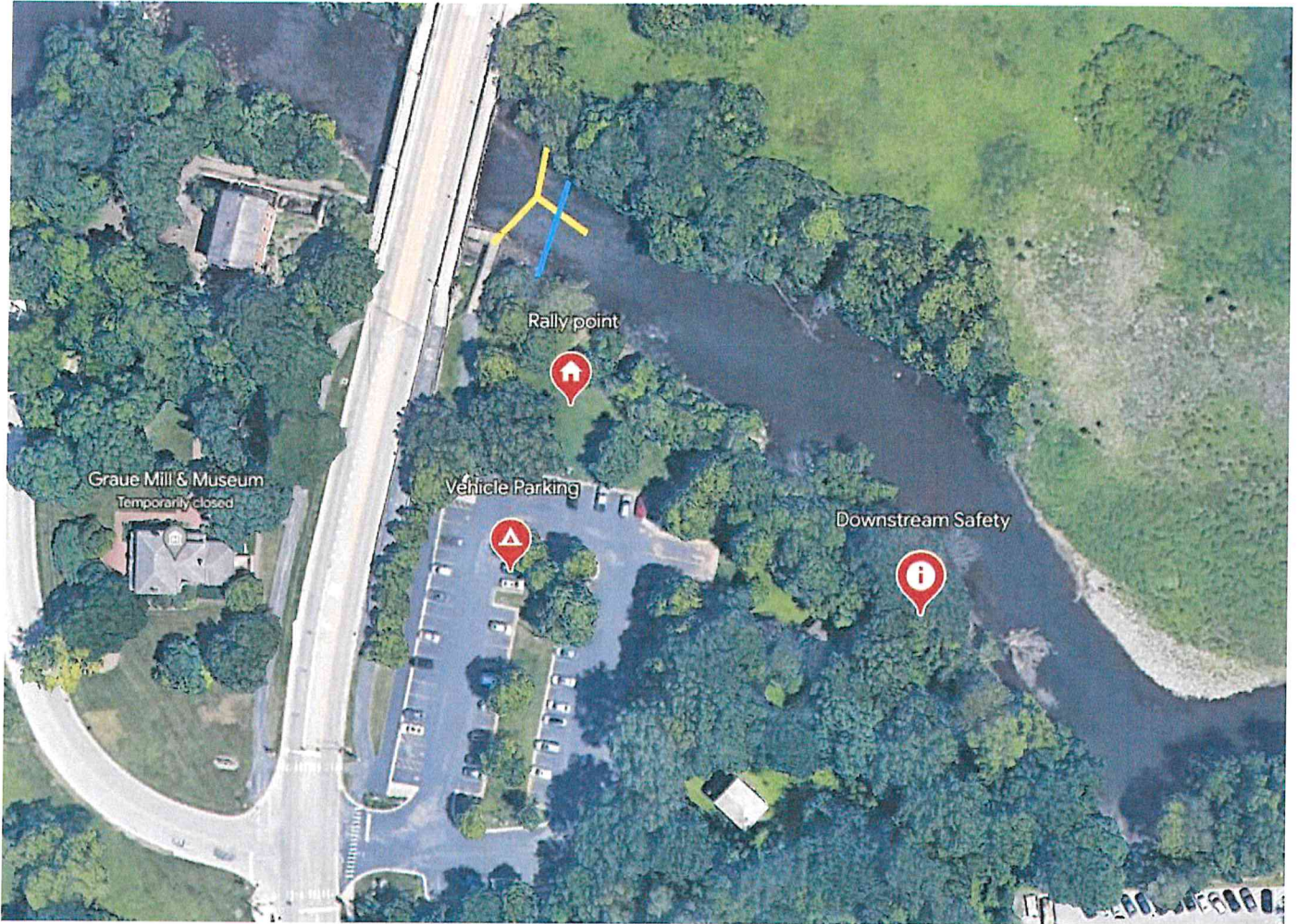
The rescuer is being held in a defensive swimming position against the water flow by means of ropes and the quick-release chest harness. This position allows for an air pocket to be formed if the water does flow over the head and shoulders of the rescuer.

Even with the formation of this air pocket, both V and Y lowers are most effective in slower flow speeds. In high speed flows and difficult water conditions, a highly trained and experienced team is required to maneuver the in-water rescuer.

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Site Survey

Graue mill, Oak Brook il



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Motorola T600 radio video:



OSFM Objectives – Select all that apply	
	Surface Water Operations
<input checked="" type="checkbox"/>	17.2.01 Develop a site survey
<input checked="" type="checkbox"/>	17.2.02 Select water rescue PPE
<input checked="" type="checkbox"/>	17.2.03 Define search parameters
<input checked="" type="checkbox"/>	17.2.04 Develop an action plan
<input checked="" type="checkbox"/>	17.2.05 Deploy a water rescue reach device
<input checked="" type="checkbox"/>	17.2.06 Deploy a water rescue rope
<input checked="" type="checkbox"/>	17.2.07 Develop and implement an action plan
<input type="checkbox"/>	17.2.08 Define procedures to provide support for helicopter water rescue operations
<input checked="" type="checkbox"/>	17.2.09 Implement procedures for performing watercraft-based rescue
<input checked="" type="checkbox"/>	17.2.10 Demonstrate fundamental survival swimming and self-rescue skills
<input checked="" type="checkbox"/>	17.2.11 Identify procedures for operation of rope systems
<input checked="" type="checkbox"/>	17.2.12 Support operations
<input checked="" type="checkbox"/>	17.2.13 Terminate an incident
	Watercraft Technician
<input checked="" type="checkbox"/>	22.3.01 Prepare a watercraft to get underway
<input checked="" type="checkbox"/>	22.3.02 Operate a watercraft
<input type="checkbox"/>	22.3.03 Plot a course
<input type="checkbox"/>	22.3.04 Operate a watercraft (docking)
<input checked="" type="checkbox"/>	22.3.05 Operate a watercraft (launch)

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<input type="checkbox"/>	22.3.06 Operate a watercraft (anchoring)
<input type="checkbox"/>	22.3.07 Operate a watercraft (Crew Overboard (COB))
<input checked="" type="checkbox"/>	22.3.08 Operate a watercraft (in-water rescuers)
<input checked="" type="checkbox"/>	22.3.09 Operate a watercraft (water-bound victim)
<input type="checkbox"/>	22.3.10 Operate a watercraft (towing)
<input type="checkbox"/>	22.3.11 Operate ancillary navigation and electronic systems
<input type="checkbox"/>	22.3.12 Shut down a watercraft
<input type="checkbox"/>	
<input type="checkbox"/>	Rope Operations
<input checked="" type="checkbox"/>	6.1.01 Direct a team
<input checked="" type="checkbox"/>	6.1.02 Direct a lowering operation
<input type="checkbox"/>	6.1.03 Construct a multiple-point anchor system
<input type="checkbox"/>	6.1.04 Construct a compound rope mechanical advantage system
<input checked="" type="checkbox"/>	6.1.05 Construct a fixed rope system
<input type="checkbox"/>	6.1.06 Direct the operation of a compound rope mechanical advantage system
<input type="checkbox"/>	6.1.07 Ascend a fixed rope in a high-angle environment
<input type="checkbox"/>	6.1.08 Descend a fixed rope in a high-angle environment
<input type="checkbox"/>	
<input type="checkbox"/>	Rope Technician
<input checked="" type="checkbox"/>	6.2.01 Complete an assignment
<input checked="" type="checkbox"/>	6.2.02 Manage the movement of the victim
<input checked="" type="checkbox"/>	6.2.03 Function as a litter tender
<input checked="" type="checkbox"/>	6.2.04 Direct a team (victim removal)
<input type="checkbox"/>	6.2.05 Direct a team (highline construction)
<input type="checkbox"/>	6.2.06 Direct a team (highline operation)
<input checked="" type="checkbox"/>	6.2.07 Access a victim
<input type="checkbox"/>	6.2.08 Isolate and manage potentially harmful energy sources
<input type="checkbox"/>	6.1.05 Construct a fixed rope system
<input type="checkbox"/>	6.1.06 Direct the operation of a compound rope mechanical advantage system
<input type="checkbox"/>	6.1.07 Ascend a fixed rope in a high-angle environment
<input type="checkbox"/>	6.1.08 Descend a fixed rope in a high-angle environment