

**Release: 1.0**  
**Effective: 7/15/2006**

**Derby Fire Department**  
**Standard Operating Procedure Number 13**  
**Underwater Search and Dive Rescue**

**1. Introduction**

- 1.1. The purpose of this procedure is to establish clear operational guidelines and safety precautions needed when responding to water emergencies requiring underwater intervention.
- 1.2. The SCUBA team will be known as the Derby Fire Department Underwater Search and Dive Rescue.

**2. Membership and Organization**

- 2.1. Any regular or auxiliary member of the Derby Fire Department is eligible to join the team. Only those members of the team holding nationally recognized certification cards will be allowed to perform the actual underwater work.
- 2.2. The officers of the Dive Team will be as follows:
  - Dive Supervisor
  - 1<sup>st</sup> Assistant Dive Supervisor
  - 2<sup>nd</sup> Assistant Dive Supervisor
- 2.3. The dive operation will operate under the Incident Command System:
  - A) The Dive Supervisor will assume the position of Operations Officer. He/she will assume command of the underwater operations, divers and vessels.
  - B) In the absence of the Dive Supervisor, an Assistant Dive Supervisor will assume charge of the operation.
  - C) In the absence of the Assistant Dive Supervisors, the most experienced diver at the scene will take charge of the operation.

**3. Activation and Response**

- 3.1. When divers are needed a call will be made to Derby Fire Comm. Derby Fire Comm will dispatch the Derby Dive Team, EMS, and Rescue/Support apparatus in accordance with the run card and existing dispatch protocol.
- 3.2. Derby Fire Comm will automatically dispatch a Dive Team assignment if a call is received for any of the following:

- Report of drowning
- Injured party in the water
- Boating accident
- Vehicle in the water
- Persons reported missing in the vicinity of a body of water
- Person(s) trapped on or fallen through ice

3.3. Standard water rescue response will be the DFD Dive Team, Engine 13, Rescue 18, Squad 4, Marine 1, and 4Kilo10

3.4. The Dive Supervisor will contact the Incident Commander for mutual aid. The calls are to be made in the following order:

- 1) Derby Police Department
- 2) Shelton Police Department
- 3) Shelton Fire Department
- 4) Seymour Fire Department

3.5. Calls to additional/other agencies will not be made without the approval of the IC. All arriving mutual aid agencies will report to the Incident Commander; who will notify the Dive Supervisor of the arrival. The Dive Supervisor will notify the Incident Commander of their assignment.

3.6. The exact time of the initial call for divers will be recorded by dispatch. Once the dive team is ready to commence operations, **ALL** boat traffic will cease in the area of the incident. This includes all fire department and rescue boats. The Dive Supervisor will discuss the task(s) of the boat operation with the boat's operator. Boats will serve as security and secure the scene from all non-authorized and civilian personnel or be assigned a specific task by the Dive Supervisor. The area will be sealed off and the approximate area of the body where it was last seen will be marked. An appropriate shore area for diver equipment and briefing will be marked off and secured from non-authorized personnel.

#### **4. Mode of Operation**

4.1. The Dive Team will operate in one of two modes: **RESCUE or RECOVERY.**

4.2. During the months of November, December, January, February, March, and April the mission will be a **RESCUE** mission for the first 90 minutes of the operation. The clock will start at the time the initial call was received by dispatch. After the 90 minutes have expired the mission will become a **RECOVERY** operation.

4.3. During the months of May, June, July, August, September, and October the mission will be a **RESCUE** mission for the first 60 minutes of the operation. The clock will start at the time the initial call was received by dispatch. After the thirty minutes has expired the mission will become a **RECOVERY** operation.

4.4. Once the operation goes into a Recovery Mode, all divers will exit the water and regroup on land for a briefing. The dive scene will now be turned over to the Derby Police Department as a crime scene. The Dive Supervisor will report to the IC and ranking Derby Police Department Supervisor for consultation. The Derby Fire Department Dive Team will now support the Derby Police Dive Team in the recovery operation.

## **5. Pre-Dive Plan**

5.1. Before any underwater operations take place, the Dive Supervisor will go over the Pre-Dive Plan Check Sheet:

- 1) The Derby Police Department will be notified.
- 2) The local EMS will be notified and requested to standby at the scene.
- 3) A call will be made to the two chambers to get their status; Griffin Hospital (203) 735-7421, Yale-New Haven Hospital or Groton (860) 449-3676
- 4) A call will be made to LifeStar for their status (800) 437-4378
- 5) Go over the dive site to spot all possible hazards (obstructions, debris, currents, weather, water temperature, etc.)

## **6. Dive Operations**

6.1. The following zones will be established at an active dive site:

- 6.1.1. Cold Zone: Area where all non-essential personnel shall gather
- 6.1.2. Warm Zone: Area where divers and tenders shall setup their gear
- 6.1.3. Hot Zone: Area where dive operations shall be performed

6.2. The Dive Supervisor will go over all witness' statements to determine an accurate mark.

6.3. The Dive Supervisor shall determine the conditions of the dive site prior to commencing any dive operations. This will include hazardous conditions, obstructions and current.

6.4. The divers will be known as follows:

- 6.4.1. Primary Diver: diver who will be performing the search
- 6.4.2. Backup Diver: diver who will be assigned to a primary diver as his/her backup and be in a ready state to assist primary diver
- 6.4.3. Safety Diver: diver who will be in a ready state to assist backup diver when needed

6.5. Each diver shall have a tender who will handle all rope operations for that diver and assist the diver in dressing and undressing.

6.6. All divers in the water shall have a scribe assigned that will complete the Derby Fire Department Dive Operation Log.

- 6.7. Before divers enter the water, the tender and diver will go over the diver's pre-dive checklist for each diver.
- 6.8. No Divers will enter the water after sunset unless extenuating circumstances exist. The authorization to enter the water after sunset will come from the Dive Supervisor. The divers will enter the water after sunset only if there is a chance of life and the operation is in the **RESCUE** mode.
- 6.9. All appropriate utilities will be notified to reduce water flow in the incident area as soon as possible.
- 6.10. No diver is to enter the water alone. Primary Divers will only enter the water after a Backup Diver is ready to be deployed in the water. The third diver on scene is to act as the Safety Diver. The Safety Diver is to be fully geared and ready to enter the water in the case of a diver emergency. The Backup Diver is to remain on the boat, if a boat is being used, or on shore if not. The Safety Diver shall be in a ready state and placement of the diver shall be at the discretion of the Dive Supervisor.
- 6.5. The Dive Supervisor will have sole authority as to the search patterns to be used, what boats are to be used if any, and the halting of the operation if necessary
- 6.6. Diver and Tender safety will be strictly adhered to throughout the mission:
  - A) No diver enters the water alone.
  - B) All divers are to wear approved buoyancy devices at all times when in the Hot Zone.
  - C) Whenever possible, dive tenders will be dive team members. If no dive team members are available then it is preferred that a support team diver or a Derby Fire Department member function as a tender.
  - D) All tenders will wear PFDs (personal flotation devices) while functioning as tenders both on land or in any vessel. At no time will anyone wear turnout gear in any boat or on shore. All personnel working in the hot zone will have personal flotation devices (PFDs).
  - E) There will be direct communication between the boat and shore personnel at all times when divers are in the water. The radios must be tested prior to divers entering the water.
- 6.7. Civilian personnel are restricted from entering the dive area. All civilians and civilian watercraft will be prohibited from the dive site. Civilians are restricted from entering the Warm or Hot zones established by the Dive Supervisor.
- 6.8. At no time will it be the responsibility of any diver to hook up any chain or cable to any object under the surface, once the body has been removed. The exception to this is for police department evidence.

## **7. Post-Recovery**

- 7.1. Once the body is recovered, the divers will decide how the body is to be removed from the water. If operating in a RESCUE mode, the body will immediately be turned over to the EMS personnel on scene. If in the RECOVERY mode, the body will be turned over to the Derby Police Department as evidence.

## **8. Termination**

- 8.1. Once the body is recovered, the divers will decide how the body is to be removed from the water. If operating in a RESCUE mode, the body. At the completion of the dive operation, divers and tenders will prepare and complete the detailed Derby Fire Department Dive Log and diagram. Each diver will be evaluated for any signs or symptoms of DCS or any other injuries. All equipment will be inventoried, cleaned and stored.

## **A. Diver's Checklist**

1. Air on!
2. Hood in place
3. Mask ready, gloves on
4. Prim Reg: exhale 1, breath 3X
5. Drysuit Hose functional
6. BC inflator button 3X
7. Pressure gauge; gauges secure; all hoses trim to body
8. Diver's cutting tools
9. Diver's weight belt; right hand release
10. Fins ready

## **B. Rope Signals**

Each member of the dive team including divers and tenders shall be familiar with the following rope signals from the tender to the diver and the diver to the tender:

### **Diver to Tender**

- 1 Diver is OK
- 2 Tender note position of diver (most likely used for obstructions found under water)
- 2+2+2 Diver is tangled, but OK, ready Backup Diver
- 3+3+3 Diver is OK, but needs assistance from Backup Diver
- 4+4+4 Diver needs immediate assistance
- 6+6 Diver has found object (note diver's position and time)

### **Tender to Diver**

- 1 Stop/face & tighten line/ you OK?
- 3 Go right (diver's right)
- 4 Go left (diver's left)
- 2+2 Search immediate area
- 3+3 Stand-by to leave bottom
- 4+4 Surface