

Mutual Aid Box Alarm System – Illinois

Special Operations – Sub-Surface Water Rescue / Recovery

Statewide Team Standards

Index #: B-08-03

Adopted: 6/19/2013

Revised:

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Subject: Sub-Surface Water Rescue / Recovery Statewide Response Team MABAS Standards

Functional Area: Operations – Statewide Plan

Category: Policy

Approved By: MABAS Executive Board



PURPOSE

To provide measurable minimal standards for sub-surface water rescue/recovery teams for MABAS Statewide Response regarding team member rosters, deployment, package size, team inventory, team member training and certification minimums.

RESPONSIBILITY

This policy applies to all MABAS recognized sub-surface water rescue/recovery units that are or become recognized as MABAS Statewide Response Teams. It is the responsibility of owning Divisions of the sub-surface statewide teams to meet minimal requirements stated in this standard.

A member of a sub-surface statewide team cannot hold a ready response slot or training slot on another Statewide Special Operations Response Team (HazMat, Technical Rescue, Urban Search & Rescue) within or outside of their Division.

SERVICE AREA

This standard applies to recognized statewide MABAS sub-surface teams defined as Water Rescue Teams qualified for below water level operations and under ice covered water surfaces for search, rescue, and recovery. The sub-surface statewide team standard does not apply nor provide service to swift water events or ice surface/cracked ice victim rescues and recoveries.

ACCOUNTABILITY

Enforcement of this policy and its standards rests initially upon the MABAS Water Rescue Committee Co-Chairs, the statewide team's owning Division Executive Board, and MABAS Headquarters field staff. Ultimate arbitration of disputes associated with this statewide team standard is the MABAS CEO and/or the MABAS President, Vice Presidents, and Treasurer/Comptroller.

REPORTING REQUIREMENT

Statewide teams shall manage and maintain all records and documentation associated with their team's personnel, training, exercises, inventory, equipment maintenance, responses, etc.

BACKGROUND

Certain MABAS Divisions have maintained dive water rescue teams over the years. Division water rescue team standards were and currently are determined at the local Division level. In 2010 discussions occurred regarding the establishment of a sub-surface water rescue and recovery statewide team standard. By 2011 a questionnaire was circulated statewide soliciting Divisional water rescue teams for sub-surface and swift water capabilities. A review of all statewide candidate sub-surface teams was completed in 2011-2012 and fourteen (14) teams were identified as being the most qualified candidates for statewide response consideration.

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Since then, the MABAS Water Rescue Committee has recognized the fourteen (14) teams as the statewide cadre for response through MABAS. Future additional teams can be considered based on need, compliance to standards potential, funding availability, and Divisional/local willingness to commit to the standard of service.

This policy is intended to define the MABAS standard for sub-surface water rescue/recovery for statewide response team personnel, training/certification, equipment inventory minimums, and response package size with options as noted.

POLICY

I. Divisional Sub-Surface Water Rescue Team MABAS Team Roster Position Assignments

| | Fully Trained Response Ready | In Upgrade Training |
|--|---------------------------------|------------------------|
| A. Dive Command Operations | 2 | 1 |
| B. Divers and Tenders | 15 | 7 |
| C. Mission Support | 3 | 2 |
| *Base Team Structure | 20 | 10 |
| D. Optional Addition Sonar Technicians | 10 | 5 |
| *Base Roster with Sonar Technicians | 30 | 15 |

Note: Each Division with a Statewide Team will provide trained and assigned boat operations – minimum trained – six (6).

II. Statewide Response Mission Deployable Team Staffing for Actual Water Response

| | | |
|--|-----------|--|
| A. Dive Command Operations | 1 | |
| B. Divers and Tenders | 6 | |
| C. Mission Support | 1 | |
| D. Reserve Boat Operations | 2 | |
| | 10 | |
| E. Sonar Technicians (Optional – Requested by Host Agency for Addition to Team Response) | 4 | |
| *Total Response Package Maximum for Statewide MABAS Team (Range 10-14) | 14 | |

Response Package for Statewide Team Will Include:

- A minimum of ten (10) individuals fully trained in areas noted A, B, C, D.
- Four Sonar Technicians if requested by host agency as a needed component of the Statewide Team (noted in E).
- Sonar Technicians will bring their full inventory of sonar equipment and accessories if requested.
- Boat operators will bring MABAS assigned Zodiac and flat-bottom boat as part of the deployment package.
- Mission Support is responsible for medical treatment of divers and deployment teams, and logistical supply support for the team. They need to be equipped accordingly.

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III. Statewide Team Member Position Responsibilities, Description, and Capabilities in the Team

A. DIVE COMMAND OPERATIONS

Team Leader

The person designated within the NIMS Command System as Rescue Group Leader responsible for the direct supervision of Special Operations Dive Team. This individual is responsible for the direct supervision of sonar operations.

B. DIVERS & TENDERS

1. Primary Diver

This person has the sole responsibility to locate the identified target.

2. Safety Diver

This individual has the primary responsibility to provide a ready response of assistance to the Primary Diver. This diver monitors the primary diver at all times and is immediately prepared to respond for rescue. This diver communicates with both Tenders and the Primary

Diver to continuously monitor the health and wellbeing of the Primary Diver.

3. 90% Diver

The diver is dressed except for mask and fins. The responsibility of this diver is to respond quickly and move up to act as the safety diver in event the Safety Diver deploys.

4. Primary Tender

The individual trained to provide control of search patterns from the surface of the water using both electronic communications and rope signals while simultaneous monitoring the status and wellbeing of the Primary Diver.

Tenders are required to provide a final dive gear check of the Primary Diver that includes proper set-up and functions as valets for diver assistance while donning and doffing gear.

5. Safety Tender

The individual is trained to provide control of search patterns from the surface of the water when the Safety Diver is deployed.

6. 90% Tender

The individual is trained to provide control of search patterns from the surface of the water when the 90% Diver is deployed.

C. MISSION SUPPORT

Mission Support – Logistics/Medic

The individual is responsible for documenting Rapid Field Neuro examinations, diver checklists, air checks and vital signs during routine dive operations. If there is an emergency, this person acts as a medical liaison to local EMS for the appropriate in-field medical diving treatment.

D. WATER OPERATIONS

Watercraft Technicians

These individuals are trained in and competent with: boat handling, loading and unloading of divers and equipment, navigation with compass and GPS, operating depth finders and transom-mounted side imaging sonar on board the boat, deployment of marker buoys, and other duties as required. These individuals have the responsibility of anchoring boats in the required position and operating the boat, in a safe manner, in current and rough seas, around hidden obstacles, sonar equipment and divers. These personnel may also serve as back-up sonar technicians during long operational periods.

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For Side Scan Sonar operations, the Watercraft Technician is required to operate the boat over a specific course following the direction of the sonar operators while the other Watercraft Technician is dedicated for controlling the depth of the sonar unit and cable management of the tow fish. A single boat package as issued by MABAS will accompany a statewide response package (two boats).

E. SONAR OPERATIONS

Sonar Technicians

The Sonar Technician is trained to operate the sonar computer viewing images in real time, directing Watercraft Technicians and Divers, and deploying marker buoys. The Sonar Technician is responsible to: record images, save target of interest utilizing GPS locations, measure and confirm target identities, deploy marker buoys and direct the Watercraft Technician following an assigned course.

F. MABAS Required Boating Equipment & Training

(Watercraft Operations Section III.D)

Training Requirements for Boat Operators shall be OSFM Watercraft Technician and completing the Illinois Boating Safety Course or course equivalency.

Minimum Equipment Required:

- Water Rescue Helmets
- Type III PFD or Type V Swift Water Rated PFD
- (2) 50ft Water Rescue Throw Bags
- 200 ft. 3/8" rope bag
- Fire Extinguisher(s) of an appropriate type & size to fit style of watercraft
- Anchors: Boats should have appropriate style and number of anchors for the waterway that they cover. The preferred type of anchor is a Dan Fourth style.
Mushroom style anchors are NOT to be utilized at rescue operations.

U.S. Coast Guard Required Equipment:

A vessel's overall length dictates the equipment that the watercraft must have to comply with federal and state laws. Watercraft operating at MABAS events shall comply with these regulations. U.S Coast Guard lists minimum equipment requirements base on the following vessel length: Less than 16 feet, 16 feet to less than 26 feet, 26 feet to less than 40 feet, and 40 feet to less than 65 feet.

IV. Minimum Equipment Inventory Per Diver on Statewide Response Sub-Surface MABAS Team

1. Dry Suit

- a. Attached Hood with Valve (Valve not required if utilizing demand valve)
- b. Dry Gloves

2. Full Face Mask

- a. Engineered as a single system designed by manufacturer
- b. Compatible with temperature extremes
- c. Ambient Air Valve equipped

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3. Regulators

- a. Environmentally protected for ice dive operations
- b. Annual service required
- c. Gauge console consisting of pressure gauge and depth gauge, or hard wire electronic equivalent.

4. Pony Bottles

- a. Used as redundant air source for divers
- b. Nineteen (19) cubic feet minimum size
- c. Regulator meets requirements of listed regulator section above with minimum of one second stage, pressure gauge
- d. Must be easily and quickly released from mount when needed

5. Buoyancy Compensator Device (BCD)

- a. Minimum lift capacity of 35lbs.
- b. Power inflator

6. Redundant Air Source Retainer System

- a. (Second Stage Regulator) Either neck mounted (necklace) or mounted in readily accessible and visible “Golden Triangle” area of the chest”

7. Weight System

- a. A single system which must allow for positive buoyancy when released causing diver to ascend
- b. Release mechanism must be readily accessible, located in the torso area, and easily identified

8. Cutting Tools

- a. Minimum (2) cutting tools
- b. One high point of attachment in “Golden Triangle” area of chest

9. Ice Equipment

- a. Harness device with locking carabineer, independent of BCD, required for ice or overhead environments
- b. Minimum 3/8-inch tether line

10. Underwater Communications Equipment

- a. Two-way electronic communications allowing for a diver to tender and diver to safety diver verbal two-way communication
- b. Wireless systems are acceptable

11. Fins (Required)

12. Tank

- a. Proof of 5-year hydrostatic test date and current VIP
- b. Eighty (80) cubic feet minimum tank size
- c. “J” valve designs are prohibited
- d. Surface Supplied Diving System are permitted

13. All equipment must be maintained per manufacturer’s specifications

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V. MABAS Statewide Sub-Surface Team members must have successfully completed all required training/certifications as stated below in order to be listed on the response side of the roster. Team members listed on the training roster are not allowed to fill a slot on the response ready roster nor are they allowed to fill in on a response for a response ready member.

A. Requisite Training:

Dive Rescue

- Rope Operations
- Water Operations
- Public Safety Diver (PSD)
- PSD Full Face Mask
- PSD Dry Suit Diver
- PSD Sub-Surface Ice Diver
- Watercraft Technician
- Sonar - manufacture training or equivalent
- EMT-B (Mission Support only)

B. Attached is a starter set of records for tracking team member initial and recurring qualification training. Each team member's records must be maintained by team leadership and available for review by MABAS staff upon request.

MUTUAL AID BOX ALARM SYSTEM

Special Operations Team Roster Work Sheet - Water Operations Dive (Sub-Surface) Tea

| | Name | D/L Number | Fire Department | Rope Operations | Water Operations | Public Safety Diver | PSD Full Face Mask | PSD Dry Suit | PSD Sub-Surface Ice Diver | Watercraft Technician | Sonar Technician | Mission Support / EMT |
|----|------|------------|-----------------|-----------------|------------------|---------------------|--------------------|--------------|---------------------------|-----------------------|------------------|-----------------------|
| | | | | Date | Date | Date | Date | Date | Date | Date | Date | Date |
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
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| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |

Color Legend: ■ Diver ■ Watercraft ■ Sonar Tech Mission Support (Rope & Water Ops Required)