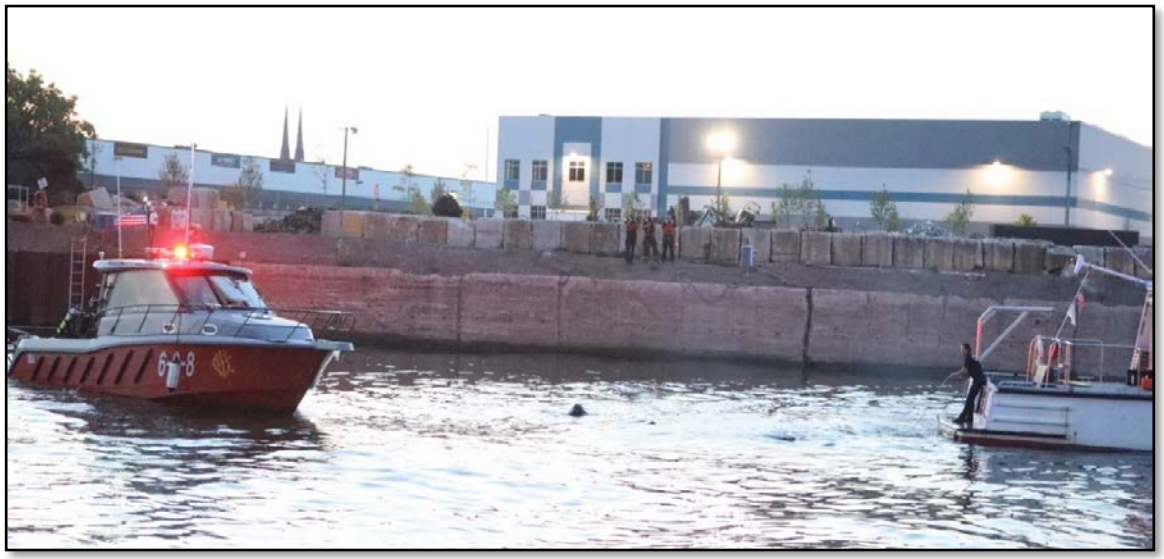
LINE OF DUTY
DEATH REPORT
VISUAL EXTENSION

F2018-09 IL

Career Firefighter/SCUBA Diver Drowns While Searching for Civilian in an Industrialized River—Illinois

Summary

- On May 28, 2018, a 46-year-old career firefighter/SCUBA diver drowned while searching for a civilian who fell from a boat into an industrialized river



Courtesy of the Fire Department

Summary

- Two divers (Diver 1 served as a stationary underwater line tender, while Diver 2 searched in a circular pattern) were deployed from the fire department helicopter
- The dive supervisor arrived, contacted the divers to direct them to surface and to reposition. During the second dive, the dive supervisor requested an air check, and Diver 1 reported 1400 pounds per square inch (psi) and Diver 2 (the victim) reported 1200 psi
- After the two divers surfaced, Diver 1 was assisting Diver 2, as he was having difficulty maintaining positive buoyancy
- A police boat threw a life ring towards Diver 2, but the fire department's fast boat approached and instructed the divers to come to its boat, causing the police boat to relocate away from the divers

Summary

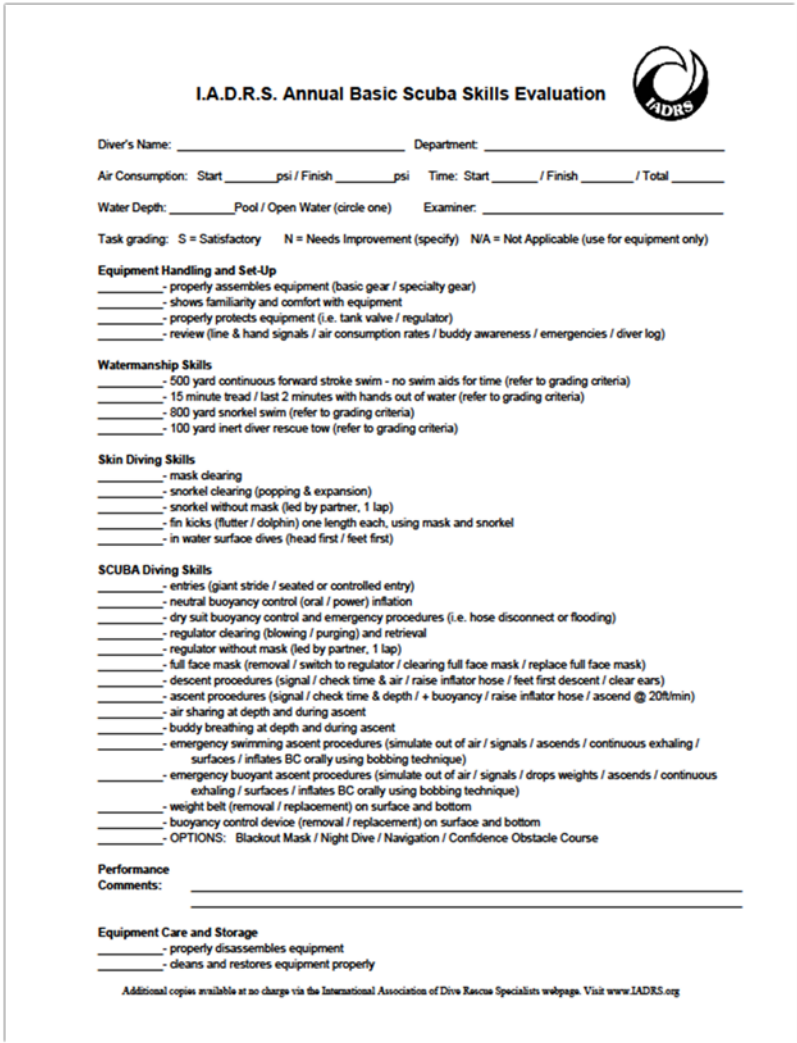
- The divers drifted toward the bow of the fast boat as Diver 1's hands were on the hull, and Diver 2 simultaneously pulled Diver 1's mask off
- While Diver 1 inflated his buoyancy compensating device, Diver 2 disappeared under the water
- Two divers from the fast boat and police divers were deployed. The fire department's rapid intervention team divers on the shoreline also were deployed
- Approximately 8 minutes later, Diver 2 was located by the police boat diver. Advanced life support measures were performed
- Diver 2 was transported to a local hospital and pronounced dead

Contributing Factors

- Air management
- Fundamental SCUBA skills
- Buoyancy control (inability to maintain positive buoyancy)
- Members unaware of distress
- Multiple agency integration and cooperation

Key Recommendation

- Fire departments and public safety dive agencies should ensure regular training on fundamental dive skills, such as air management, buoyancy control, redundant air and out-of-air procedures



I.A.D.R.S. Annual Basic Scuba Skills Evaluation

Diver's Name: _____ Department: _____

Air Consumption: Start _____psi / Finish _____psi Time: Start _____ / Finish _____ / Total _____

Water Depth: _____Pool / Open Water (circle one) Examiner: _____

Task grading: S = Satisfactory N = Needs Improvement (specify) N/A = Not Applicable (use for equipment only)

Equipment Handling and Set-Up
_____- properly assembles equipment (basic gear / specialty gear)
_____- shows familiarity and comfort with equipment
_____- properly protects equipment (i.e. tank valve / regulator)
_____- review (line & hand signals / air consumption rates / buddy awareness / emergencies / diver log)

Watermanship Skills
_____- 500 yard continuous forward stroke swim - no swim aids for time (refer to grading criteria)
_____- 15 minute tread / last 2 minutes with hands out of water (refer to grading criteria)
_____- 800 yard snorkel swim (refer to grading criteria)
_____- 100 yard inert diver rescue tow (refer to grading criteria)

Skin Diving Skills
_____- mask clearing
_____- snorkel clearing (popping & expansion)
_____- snorkel without mask (led by partner, 1 lap)
_____- fin kicks (flutter / dolphin) one length each, using mask and snorkel
_____- in water surface dives (head first / feet first)

SCUBA Diving Skills
_____- entries (giant stride / seated or controlled entry)
_____- neutral buoyancy control (oral / power) inflation
_____- dry suit buoyancy control and emergency procedures (i.e. hose disconnect or flooding)
_____- regulator clearing (blowing / purging) and retrieval
_____- regulator without mask (led by partner, 1 lap)
_____- full face mask (removal / switch to regulator / clearing full face mask / replace full face mask)
_____- descent procedures (signal / check time & air / raise inflator hose / feet first descent / clear ears)
_____- ascent procedures (signal / check time & depth / + buoyancy / raise inflator hose / ascend @ 20ft/min)
_____- air sharing at depth and during ascent
_____- buddy breathing at depth and during ascent
_____- emergency swimming ascent procedures (simulate out of air / signals / ascends / continuous exhaling / surfaces / inflates BC orally using bobbing technique)
_____- emergency buoyant ascent procedures (simulate out of air / signals / drops weights / ascends / continuous exhaling / surfaces / inflates BC orally using bobbing technique)
_____- weight belt (removal / replacement) on surface and bottom
_____- buoyancy control device (removal / replacement) on surface and bottom
_____- OPTIONS: Blackout Mask / Night Dive / Navigation / Confidence Obstacle Course

Performance Comments: _____

Equipment Care and Storage
_____- properly disassembles equipment
_____- cleans and restores equipment properly

Additional copies available at no charge via the International Association of Dive Rescue Specialists webpage. Visit www.IADRS.org

Figure courtesy of the International Association of Dive Rescue

Key Recommendation

- Fire departments and public safety dive agencies should ensure that incident commanders, dive group leaders, and members maintain situational awareness, accountability, and frequent and accurate air status on all divers

NIOSH Photo

Key Recommendation

- Fire departments and public safety dive agencies should ensure all public safety divers use dive computers

Courtesy of the Chicago Fire Department

Key Recommendation

- Fire departments, standard-setting organizations, public safety dive agencies, and SCUBA manufacturers should consider adding heads-up displays in all full-face mask SCUBA because of frequent zero-visibility/silt-out conditions

Courtesy of the Chicago Fire Department

Key Recommendation

- Fire departments and public safety dive agencies should ensure that a properly trained dive safety officer is on scene and integrated into the command structure

Courtesy of Getty Images

Key Recommendation

- Fire departments and public safety dive agencies should recognize public safety SCUBA diving as a high-risk/low-frequency event and ensure that public safety divers are properly trained, equipped, and supported to perform dives; training and standard operating procedures/standard operating guidelines (SOPs/SOGs) should include the regional dive and water rescue team(s) who regularly respond with interagency cooperation

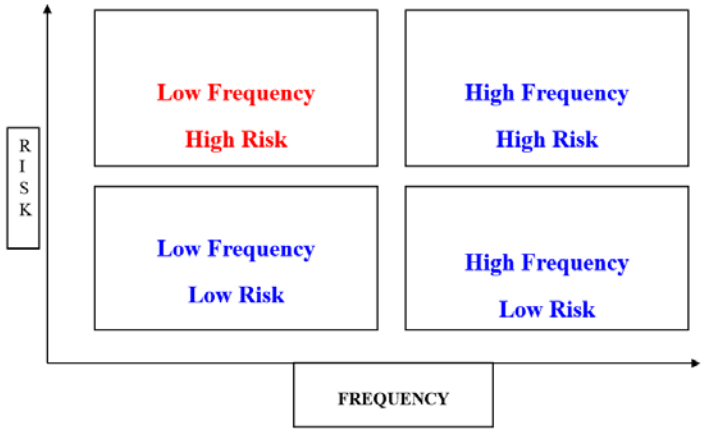


Figure courtesy of Graham Research Consultants

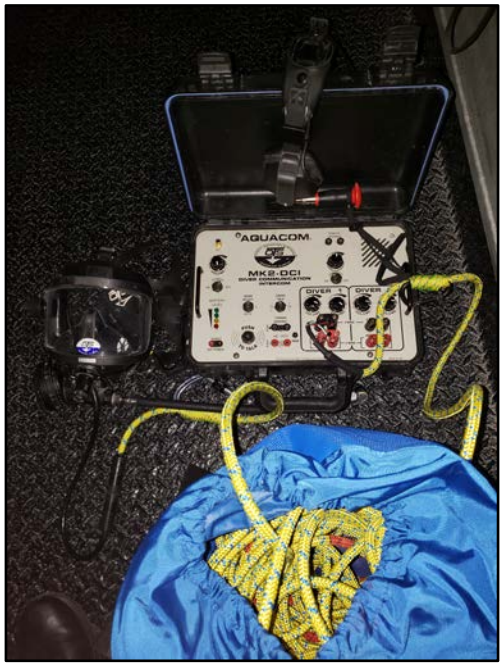
Key Recommendation

- Fire departments and public safety dive agencies should ensure that the helicopter SOPs/SOGs address diver in distress situations when divers are deployed prior to the arrival of shore and/or marine units

Courtesy of the Fire Department

Key Recommendation

- Fire departments and public safety dive agencies should ensure that communications equipment is reliable and has interoperability



Courtesy of the Chicago Fire Department

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FFFIPP Webpage

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