03-11-2004 Lacona NH – Mark Miller - FF PSD Training Ice Dry Suits Update

March 11, 2004
LACONIA, New Hampshire
Lt. Mark Miller
Laconia Fire Department

New Hampshire Firefighter Drowns While Diving

http://cms.firehouse.com/web/online/In-The-Line-Of-Duty/New-Hampshire-Firefighter-Drowns-While-Diving/39$27443

Posted: 03-12-2004 **Updated**: 06-14-2007 11:43:07 AM

GEOFF CUNNINGHAM *Courtesy of* *The Citizen*

LACONIA Teams of divers from the all across the state and Boston resumed the search this morning to recover the body of Laconia Fire Department Lt. Mark Miller who drowned during a training accident at Weirs Beach on Thursday afternoon.

Citizen Photo / Kevin Sperl
Gilford and Laconia water rescue teams search the open water off the Weirs Beach docks Thursday afternoon for missing Laconia Fire Department diver Lt. Mark Miller who disappeared while performing training dives.

Also assisting in the search are the Fish and Game Department, the New Hampshire State Police, the Marine Patrol and area dive teams.

Fire Chief Ken Erickson said the search will continue until his body is found.

Miller, a member of the department for 17 years and fellow department diver JP Hobby were testing new suits when Miller failed to surface.

The search resumed this morning after Erickson conducted a briefing for the search personnel at the Weirs Beach station.

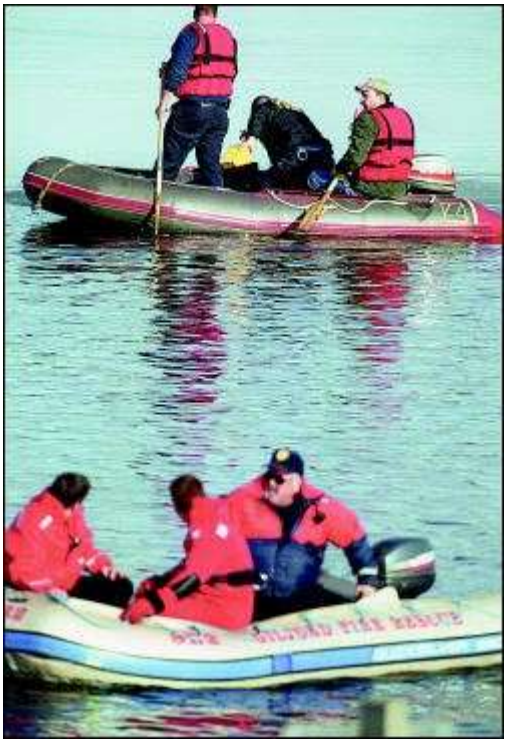
Gov. Craig Benson was on the scene at daylight to meet with the chief, Miller's family and to offer whatever state assistance was needed. "This reminds us that everyday firefighters put their lives on the line for the men and women in the state. This is just a reminder of how quickly things can turn around. It's tough," he said after meeting with the family.

"Having you here is a great boost for morale," the chief told the governor.

Dive teams from the Boston, Concord, Nashua, Portsmouth and Manchester fire departments responded to the call for all available divers to assist in the recovery. One department crew stayed on the bridge over the channel all night just in case Miller's body washed out from under the ice and was carried downstream by the current, police said this morning.

Rescue personnel from throughout the state converged on Weirs Bay Thursday afternoon and searched for any signs of the firefighter.

The search was called off shortly after 6:30 p.m. because of darkness.
His colleagues returned to the scene this morning to resume what has been an extremely emotional rescue-turned-recovery effort. "We are going to do everything in our power to get our firefighter home," Erickson said Thursday afternoon, fighting back tears.



Citizen Photo / Kevin Sperl
The emotional strain is evident in the faces of fire and rescue personnel while searching for Laconia Fire Department Lt. Mark Miller, who didn't surface during a training dive off the Weirs Beach Docks Thursday afternoon.

A search crew made up of divers, medical personnel, police officers and firefighters from all over the state, was halted at approximately 6:35 p.m. - some four hours after the diver was reported missing.

Erickson said the members of the local department were training with a new set of dive suits just off the main dock for the Mount Washington cruise ship, when trouble arose around 2:45 p.m.

Both Miller and Hobby are experienced divers.

The pair was believed to be diving in an area of open water that surrounded the docks and extended out approximately 100 feet to a solid sheet of ice. The open water ran to the shore along the length of the docks, which have electric bubblers keeping the water from freezing solid.

Laconia Police Sgt. Steven Clarke - who spoke for Erickson earlier on Thursday - said the pair gave each other a "thumbs-up" sign to surface. He said one man reached the surface to find his partner missing. Despite going back under, the firefighter could not find his partner.

A Massachusetts resident, who wished to remain unnamed, said she was walking on the boardwalk when she heard shouts from the docks below. "He was alone and was yelling that his friend was missing," she said. The woman called 911 and firefighters immediately responded to the scene calling all available dive teams in the state to respond.

Crews from Chichester, Belmont, Franklin, Tilton-Northfield, Gilford, Meredith, Alton, Barnstead and Gilmanton were all on scene assisting. So too was the state Fish and Game Dive Team and numerous private diving outfits. Officials began by sending teams of boats and divers into the water in the immediate area of the docks.

Dan McKenney of Wolfeboro's Dive Winnipesaukee was among those who assisted in the underwater part of the search effort. He said water temperatures were somewhere in the area of 35 degrees with depths ranging from 20 to 30 feet. He said visibility under the water is between 15 and 20 feet for those searching.

Authorities did not say how much air was believed to be in the victim''s tank when he was last seen, but experts said a full tank only lasts around 30 minutes in this weather.

Experienced ice-divers on the scene said it can become extremely disorienting when one is under water that is covered with ice. It is for this reason that divers going under the ice are always tethered to a person above the surface.

As more crews arrived on the scene they sent firefighters in "dry-suits" out onto the edge of the ice to try to spot the lost diver. The crews fed underwater cameras through holes that they cut with ice-augers. Authorities said there was still 2-3 feet of ice where they were cutting. Searchers also could be seen using metal detectors to patrol the area on the ice.

Authorities also positioned a search boat near the head of Paugus Bay near the bridge, where the current is said to flow.

The victim's family and friends stood on the dock and were comforted by firefighters as the search crews worked. City Manager Eileen Cabanel and other top officials also responded to the scene to lend their support. A large crowd of spectators also lined the edge of the boardwalk, as numerous teams flowed up and down the ramp to the Mount Washington dock.

Dozens of emergency personnel could be seen all over the water, ice, and docks by the time night fell and the search was temporarily halted for safety reasons.

The chief said the state's fire union has pledged its support with teams from as far away as Boston assisting in today's effort. McKenney and others who

assisted on Thursday said they, too, would likely be back. "If they need us, we'll be here," he said.

Although no official change has been made, the chief said the search is now "basically a recovery effort."

The department's Web site now shows a red, white and blue ribbon beside Miller's name with the words "We remember."

The chief praised the focused efforts of those who assisted in the search on Thursday amid extreme emotions. Fire and police crews were on the scene all night to secure the area.

"Until he comes home ... they'll be there with him," he said. .

F2004 36

NIOSH Fire Fighter Fatality Investigation and Prevention Program

Death in the line of duty...

A summary of a NIOSH fire fighter fatality investigation *July 13, 2005*

New Hampshire - Career Fire Fighter Drowns While Conducting Training Dive

http://www.cdc.gov/niosh/face200436.html

SUMMARY

On March 11, 2004, a 43-year–old male career fire fighter drowned while training for fire department dive rescue operations. The victim was diving with another dive rescue team member in a large, partially ice-covered lake when, after his partner lost visual track of him, the victim failed to surface. The dive partner notified authorities through a pedestrian and a commercial dock attendant while he continued searching from the land docks and parking area. Multiple governmental agencies and private commercial divers conducted an organized search for the missing diver, but the victim's body was not found or recovered until the next day. He was pronounced dead on-scene.

NIOSH Investigators concluded that, to minimize the risk of similar occurrences, fire departments should:

- ***ensure that an experienced backup diver, a safety boat, extra air tanks, and a medical unit is on the scene of all training dives***
- ***ensure that Standard Operating Guidelines (SOG's) establish and enforce separate but parallel diver training guidelines along with emergency rescue diving guidelines***

INTRODUCTION

On March 11, 2004, a 43-year-old male career firefighter drowned while training with another fire department dive rescue team member. The National Institute for Occupational Safety and Health (NIOSH) was notified of this incident on March 15, 2004 by the U.S. Fire Administration (USFA). On August 20, 2004, two safety and occupational health specialists from the NIOSH Fire Fighter Fatality Investigation and Prevention Program investigated the incident. The NIOSH team met with the Chief of the department and interviewed the victim's diving partner. The NIOSH team then visited the site of the fatality with the diving partner and the Chief. A representative from the New Hampshire Marine Patrol also met the team at the site. The diving partner pointed out relevant landmarks and the approximate location where the victim's body was found. NIOSH reviewed the State of New Hampshire Department of Safety Marine Patrol investigation report, the fire department's Underwater Response Team Standard Operating Guidelines (SOGs), a copy of the victim's dive log and training records, the dry suit user's manual, the Chief Medical Examiner's Report and the Certificate of Death. The State of New Hampshire Department of Safety Marine Patrol maintained possession of the diving suit and gear worn by the victim. An evaluation of the dry suit was conducted by the U.S. Navy Experimental Diving Unit located in Panama City, Florida at the request of the victim's fire department.

Dive Equipment

Both divers were equipped with full self-contained underwater breathing apparatus (SCUBA) and new dry suits. They were also equipped with compasses, dive computers, a camera and other miscellaneous tools.

The State of New Hampshire Department of Safety Marine Patrol's report concluded that there had been manufacturer-authorized trimming of the neck seal on the new dry suit. The outlet valve was found in a fully open position and there had been replacement of a factory one-hole inlet valve nipple with a two-hole inlet valve nipple. The two-hole inlet valve was not an authorized manufacturer recall replacement or retrofit. The report suggested that the neck seal may not have been trimmed to the proper size and could have led to a condition of carotid sinus reflex causing the victim to lose consciousness. The State report also speculated that an open outlet valve would have let air

escape from the suit and would have allowed a condition of hypothermia. NIOSH was not able to examine the victim's suit.

An evaluation of the dry suit was conducted by the U.S. Navy Experimental Diving Unit located in Panama City, Florida at the request of the victim's fire department. The initial observations and findings listed in the report describe a dry suit that was clean, dry, and in good condition with no apparent damage and little wear. The latex neck seal had been trimmed to a circumference of approximately 12.75 inches. The latex wrist seals had also been trimmed. Both the inflation and deflation valves were clean and in good working order. The investigator, who was similar in size to the victim with the same neck circumference, donned the dry suit and found it to be tight. He noted that additional trimming of the neck seal would have been necessary to provide a comfortable fit. The Navy evaluator did not feel that the two-hole inlet valve was a contributing factor in this incident.

Weather

The sky was clear and sunny, the winds were calm and the air temperature was approximately 28 degrees Fahrenheit at the time of the incident.

Dive Site

The dive site was located at a lake with a rocky shoreline and bottom, little vegetation in the shallow regions, and flood controlled by a dam. The lake is at an elevation of 504 feet above sea level, is approximately 44,590 acres in size and has a shoreline of about 180 miles. The lake has a mean depth of 43 feet and a maximum depth of 180 feet. The water temperature at the time of the incident was approximately 35 degrees Fahrenheit, with water visibility reported to be about 15 feet.

Fire Department

The career department involved in this incident consists of 28 uniformed fire fighters serving a population of about 17,000 in a geographical area of about 26 square miles. The geographical area contains about 44 miles of the lake shoreline.

Training

The victim had 17 years of fire fighting experience with this fire department. The victim had 22 years of diver training and diving experience. He also had extensive diver rescue training, with certifications including the International Rescue Instructors Association, Professional Association of Diving Instructors (PADI) Ice Diver, PADI Dry Suit Diver, National Association of Underwater Instructors (NAUI) Master Scuba Diver and Fathom Diver, Scuba Diving International Public Safety Diver and Rescue Diver.

INVESTIGATION

On March 11, 2004, at approximately 1200 hours, the victim and his dive partner went on a dive rescue training exercise in a local lake. They both had completed a 24 hour work shift at 0700 hours. The purpose of the dive was to continue practicing with their newer dry suits. They had previously worn their dry suits at least eight times in other drills including dry land and swimming pool exercises. The fire fighter divers notified the Chief about their diving plans via telephone. The divers also requested and received permission from the local commercial cruise operator of the dock area about conducting their training near the dock.

The two divers performed a mutual equipment check and discussed a basic route plan that included a compass heading. The victim was using a borrowed mask as he had experienced problems with his seal on a previous dive, the day before. He left his own mask on the edge of the dock in case he needed to use it later. The divers' general plan was to stay in open water along the docks to observe the area around the pier pilings for hazards (Diagram). They specifically decided to stay away from the iced over area of the lake which was prevalent to about 50 feet away from the docks. Two large water circulators, which helped control ice build-up around the docks from the piers, were effective and running at the time of the incident.

At approximately 1400 hours, the victim entered the shallow (approximately 12 feet) water first and surfaced without problems. The dive partner entered next and also surfaced without problems. They proceeded to follow the dock piers north along the shoreline and were under the water for about 20 minutes when the victim went in a Southeast direction where he found what the partner described to investigators as an abandoned boiler. The dive partner took a posed picture of the victim next to the boiler.

Shortly after the picture was taken, the partner lost visual track of the victim. He looked for the victim in all directions, but thinking that he may have returned to the dock area to get the other mask, the partner proceeded to another location underwater. When he surfaced he still did not see the victim and looked for surface bubbles to indicate his location. No bubbles were visible. He also looked for wet areas near the dock where the victim may have exited the water, but the area was completely dry. Realizing his dive partner may have been experiencing problems, he proceeded to call for the victim and notified a passing pedestrian that he needed help with a missing diver and requested that she call 911. He then went directly to a commercial cruise employee to inform her of the situation and also requested that she also call 911. He then walked over to the parking area to see if the victim had returned to the parked vehicle while he continued to scan the lake for surface bubbles.

Engine 5 was dispatched and arrived on the scene at 1442 hours. The victim's dive partner had about 1100 pounds of air left in his SCUBA tank. The engine crew tethered him with a rope to do a sweep search under the

ice. There were no extra SCUBA air bottles or any other certified divers on scene at the time of the initial search.

Ultimately, it is estimated that there were 128 personnel from multiple government agencies and a local dive shop involved in the search. The Chief of the Department acted as the incident commander for the duration of the search. The victim's body was found the following day at about 1250 hours. He was found almost 300 feet to the east from where he and his dive partner originally entered the water. The victim was at the bottom of the lake in about 20 feet of ice-covered water. All of the victim's equipment was in place except for the regulator which was not in his mouth. He was pronounced dead on scene. It was later determined that his SCUBA tank was empty of air and the exhaust valve on his suit was in a fully open position.

CAUSE OF DEATH

The death certificate listed the cause of death as drowning.

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Fire departments should ensure that an experienced backup diver, a safety boat, extra air tanks, and a medical unit is on the scene of all training dives.

Discussion: A backup diver may be critically important in the case of a diving emergency, since they can provide a fresh, outside source of rescue.[1, 2] In addition, personnel on the shore should be able to monitor communication among divers both above and below water through an electronic surface monitor. In this incident, a backup diver could have been instrumental in the attempted rescue. A safety boat could provide a critical and mobile landing for an emergency situation, and transport of additional personnel to the search location. A medic unit on scene or within a very short response time and dedicated to the training could provide oxygen and other critical medical aid and transport for emergency situations.[1, 2]

Recommendation #2: Fire departments should ensure that Standard Operating Guidelines (SOG's) establish and enforce separate but parallel diver training guidelines along with emergency rescue diving guidelines.

Discussion: Fire departments should treat training dives with the same oversight as their standard general operating guidelines for emergency rescue diving, but specifically outline the unique safety needs for training dives.

In this situation, the fire department had well developed guidelines for dive rescue team membership and emergency procedures, but didn't specifically address training operations as either the same or different than the

guidelines. The department SOG's required the training officer to ensure that all training exercises were conducted in accordance with the established guidelines, but these could create a situation that allows unclear procedures or lessened safety standards for training dives as opposed to emergency rescue dive situations. Well conceived SOG's would ensure that there is positive communications between dive partners and the surface. The SOG's should also outline the use of a backup diver and a ninety-percent-ready diver who are in position and ready to help for both training and rescue dives.[1] For example, the fire department's SOG's included the use of an incident commander, a safety officer, team leader, and other positions that may not be needed, or may have different titles, on ancillary training dives. The SOG's should include specific requirements to maintain team integrity through the "buddy system" on all dives, and designated position titles could be combined but still designated for all training dives.

REFERENCES

1. NIOSH [2004]. NIOSH Workplace Solutions: Divers Beware: Training Dives Present Serious Hazards to Fire Fighters. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2004-152.
2. Hendrick W, Zaferes A, Nelson C [2000]. Public safety diving. Saddle Brook, NJ: Fire Engineering Books and Videos.

Additional resources regarding SCUBA diving include the following:

NFPA 1670—Standard on operations and training for technical rescue incidents.

NFPA 1006—Standard for rescue technician professional qualifications.

PADI [1990]. PADI open water diver manual. Santa Ana, CA: Professional Association of Diving Instructors.

NAUI [2000]. NAUI SCUBA diver manual. Tampa, FL: National Association of Underwater Instructors.

INVESTIGATOR INFORMATION

This incident was investigated by Bruce Oerter and Mark McFall, Safety and Occupational Health Specialists with the Fatality Investigation Team of the Division of Safety Research, NIOSH.

DIAGRAM

This page was last updated on 07/13/05.

City of

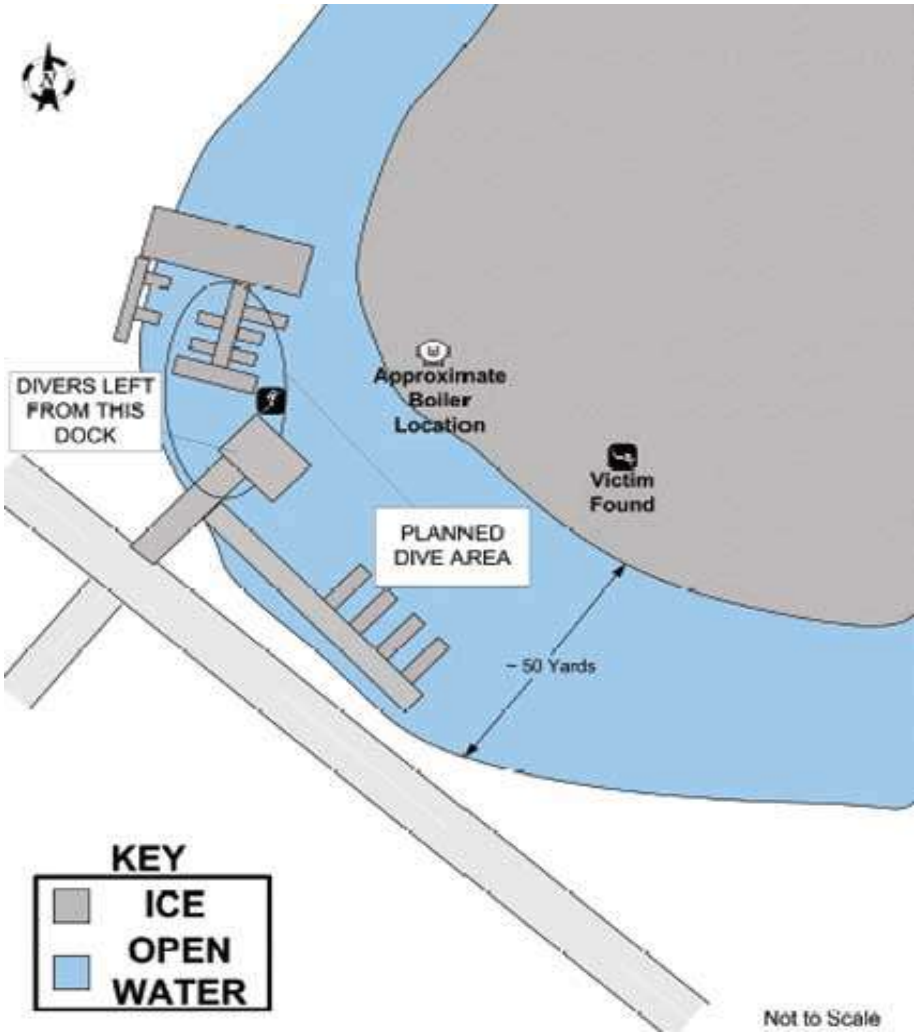


Diagram. Aerial view of dive area.

Laconia
Fire Department

On March 11, 2004 Firefighter Mark Miller died while conducting a training drill. This was the worst experience of my life and career. It was devastating to the fire department. As bad as this was for us, we could not comprehend how truly devastating it was to Mark's family.

Within days of Mark's death, I received a call from representatives of the 100 Club.

They came to Laconia to explain what the 100 Club did for the family of fire and police officers who died in the line of duty. We eventually went to meet with Gayle Miller, Mark's wife, at her parents' home. This was a very difficult time for all of us. I can vividly remember the meeting as if it were yesterday. Gayle was lost; she had no idea what she was going to do. It is strange what we worry about in times of crisis. Gayle was worried about how she was going to pay for the funeral, or make next month's mortgage payment, or pay this week's heating bill. It was about this time that the 100 Club presented her with the check for $10,000 and told her it was hers to use any way she wanted. They then explained the other benefits she would receive, such as the tuition for her three daughters, and the annual Christmas gifts. This was a very emotional moment for all of us. I don't know how representatives of the 100 Club can do this and get through it with as much dignity as they do. You could see a slight change in Gayle. You could sense that she realized that she was not alone and that she would survive.

It has been just short of 4 years since Mark's death. I don't think there is a day goes by that I don't think of him or his family. The 100 Club is a great organization that provides a great service. Many of us in the emergency services are not aware of how many people are involved in this group, or what they do. I truly hope and pray that no other firefighters' or police officers' family ever have to meet with the 100 Club. But it is very reassuring to know that they are there waiting to help and that all the wonderful people of the 100 Club give so willingly.

Kenneth L. Erickson
Fire Chief
City of Laconia Fire Department
http://www.100clubnh.org/KenEricksonletter.pdf

FIREFIGHTER FUNERAL

Photos on web site

The community mourns the death of Laconia firefighter Lt. Mark Miller who died in the line of duty on March 11, 2004.

Miller disappeared during a dive training exercise at Weirs Beach and was recovered the following day after a search by nearly 200 rescuers. More than 1,200 firefighters marched through Laconia the day of his funeral.

Firefighters salute as the body of Mark Miller is carried up the Mt. Washington gangway on Friday, March 12, 2004. Leading the processional is Laconia Fire Chief Kenneth Erickson. Miller disappeared in Lake Winnipesaukee while on a dive training exercise.
By: Alan MacRae/for the Monitor

Laconia Fire Dept. Life Saving Fund Background

http://www.firenews.org/bikersboaters.pdf

http://bikeweek.com/news.cfm/mode/details/id/2063

Peter Makris was influential in the establishment of the Laconia Fire Department Life Saving Fund. Previously, there was no local provision for rescue diving or rescue boats.

After a training accident that cost the life of 18-year veteran firefighter Mark Miller, a public effort was started by a generous donation from Peter and the community rallied around the cause. This local fund-raising effort raised enough money in six months to purchase an Edgewater 21' boat, built to military specifications, to facilitate the 30+ rescues per year that the department undertakes.

This division of the Laconia Fire Dept. is funded totally through publicly donated money, as the State's Dept. of Fish and Game can often be too slow to respond to a local call for water or ice rescue. As a non-taxpayer supported division, the annual budget of approximately $15,000/year depends on the generosity of the beneficiaries and supporters of the Life Saving Fund. We are proud to honor Peter Makris, the original annual corporate sponsor, with this fund raising event to continue his generous support.

This fund was established in memory of Mark Miller, who left behind a wife and three children. We respect his years of dutiful service, his dream of creating the rescue dive team and the Life Saving Fund is an on-going tribute to him.

There are 32 Firefighters in the Laconia Fire Department, 9 fully qualified as rescue and ice divers and 18 are qualified as rescue boat operators and all are qualified as ice technicians for surface rescue.
# # #

Laconia diver believed drowned

By TOM FAHEY Union Leader Staff

Divers plan to resume their search today for a Laconia firefighter who is missing and presumed to have drowned yesterday during a training dive in Lake Winnipesaukee.

Firefighter Mark Miller, an expert diver, was reported missing in the Weirs Beach section of the state's largest lake about 3:45 p.m. He and another firefighter were on a training dive. Authorities did not release the name of Miller's companion.

Fish and Game Maj. Tim Acerno said the two communicated beneath the water and agreed to head up. But when Miller's companion came to the surface, he was alone, according to Acerno.

The diver who surfaced tried to find Miller beneath the surface without success, then blew a whistle and shouted to a woman on the shore to send for help. She called 911 to bring emergency crews to the scene, Acerno said.

Rescue crews and divers from throughout the Lakes Region responded, and searched the waters until darkness fell, he said. Crews drilled through the 2-foot-thick ice with augers. The site is near the pier the Mt. Washington cruise ship uses in summer and fall.

Acerno said the divers had no plans to go beneath the ice yesterday. With little snowpack left on the lake surface, conditions are extremely tricky, he said. "On a beautiful sunny day like we had today, it is easy to stray beneath the ice. The sun shines right through it and you can't tell the difference between it and the open water," he said.

Even some veteran divers hesitate to dive beneath the ice because it is so easy to become disoriented. Use of a safety tether is the rule of thumb for any dive beneath the ice, Acerno said.

Miller was described as a master diver. He is married and the father of stepchildren, two of whom are high school age.

Gov. Craig Benson asked those at the New Hampshire Fire Chiefs annual March meeting in Manchester last night to pause for a moment of

silence to remember Miller.

Acerno said officials planned to return to Weirs Beach about 8 a.m. today to resume the search.

Laconia Fire and Police officials are involved in the search, along with the New Hampshire Marine Patrol and New Hampshire Fish and Game officials.

Search resumes for missing diver in Laconia Firefighter presumed drowned

http://www.citizen.com/news2004/March2004/March_12/laconia_03.12.04d.asp
By GEOFF CUNNINGHAM Jr. And GORDON D. KING Staff Writers

LACONIA — Teams of divers from the all across the state and Boston resumed the search this morning to recover the body of Laconia Fire Department Lt. Mark Miller who drowned during a training accident at Weirs Beach on Thursday afternoon.

Also assisting in the search are the Fish and Game Department, the New Hampshire State Police, the Marine Patrol and area dive teams. Fire Chief Ken Erickson said the search will continue until his bodyis found.

Miller, a member of the department for 17 years and fellow department diver JP Hobby were testing new suits when Miller failed to surface.

The search resumed this morning after Erickson conducted a briefing for the search personnel at the Weirs Beach station.

Gov. Craig Benson was on the scene at daylight to meet with the chief, Miller's family and to offer whatever state assistance was needed. "This reminds us that everyday firefighters put their lives on the line for the men and women in the state. This is just a reminder of how quickly things can turn around. It's tough," he said after meeting with the family. "Having you here is a great boost for morale," the chief told the governor.

Dive teams from the Boston, Concord, Nashua, Portsmouth and Manchester fire departments responded to the call for all available divers to assist in the recovery.

One department crew stayed on the bridge over the channel all night just in case Miller's body washed out from under the ice and was carried downstream by the current, police said this morning.

Rescue personnel from throughout the state converged on Weirs Bay Thursday afternoon and searched for any signs of the firefighter. The search was called off shortly after 6:30 p.m. because of darkness.

His colleagues returned to the scene this morning to resume what has been

an extremely emotional rescue-turned-recovery effort. "We are going to do everything in our power to get our firefighter home," Erickson said Thursday afternoon, fighting back tears.

A search crew made up of divers, medical personnel, police officers and firefighters from all over the state, was halted at approximately 6:35 p.m. — some four hours after the diver was reported missing.

Erickson said the members of the local department were training with a new set of dive suits just off the main dock for the Mount Washington cruise ship, when trouble arose around 2:45 p.m.

Both Miller and Hobby are experienced divers.

The pair was believed to be diving in an area of open water that surrounded the docks and extended out approximately 100 feet to a solid sheet of ice. The open water ran to the shore along the length of the docks, which have electric bubblers keeping the water from freezing solid.

Laconia Police Sgt. Steven Clarke — who spoke for Erickson earlier on Thursday — said the pair gave each other a "thumbs-up" sign to surface. He said one man reached the surface to find his partner missing. Despite going back under, the firefighter could not find his partner.

A Massachusetts resident, who wished to remain unnamed, said she was walking on the boardwalk when she heard shouts from the docks below. "He was alone and was yelling that his friend was missing," she said. The woman called 911 and firefighters immediately responded to the scene calling all available dive teams in the state to respond.

Crews from Chichester, Belmont, Franklin, Tilton-Northfield, Gilford, Meredith, Alton, Barnstead and Gilmanton were all on scene assisting. So too was the state Fish and Game Dive Team and numerous private diving outfits.

Officials began by sending teams of boats and divers into the water in the immediate area of the docks.

Dan McKenney of Wolfeboro's Dive Winnipesaukee was among those who assisted in the underwater part of the search effort.

He said water temperatures were somewhere in the area of 35 degrees with depths ranging from 20 to 30 feet. He said visibility under the water is between 15 and 20 feet for those searching.

Authorities did not say how much air was believed to be in the victim's tank when he was last seen, but experts said a full tank only lasts around 30 minutes in this weather.

Experienced ice-divers on the scene said it can become extremely disorienting when one is under water that is covered with ice. It is for this reason that divers going under the ice are always tethered to a person above the surface.

As more crews arrived on the scene they sent firefighters in "dry-suits" out onto the edge of the ice to try to spot the lost diver.

The crews fed underwater cameras through holes that they cut with ice-augers. Authorities said there was still 2-3 feet of ice where they were cutting. Searchers also could be seen using metal detectors to patrol the area on the ice. Authorities also positioned a search boat near the head of Paugus Bay near the bridge, where the current is said to flow.

The victim's family and friends stood on the dock and were comforted by firefighters as the search crews worked. City Manager Eileen Cabanel and other top officials also responded to the scene to lend their support.

A large crowd of spectators also lined the edge of the boardwalk, as numerous teams flowed up and down the ramp to the Mount Washington dock.

Dozens of emergency personnel could be seen all over the water, ice, and docks by the time night fell and the search was temporarily halted for safety reasons.

The chief said the state's fire union has pledged its support with teams from as far away as Boston assisting in today's effort. McKenney and others who assisted on Thursday said they, too, would likely be back. "If they need us, we'll be here," he said.

Although no official change has been made, the chief said the search is now "basically a recovery effort." The department's Web site now shows a red, white and blue ribbon beside Miller's name with the words "We remember."

The chief praised the focused efforts of those who assisted in the search on Thursday amid extreme emotions. Fire and police crews were on the scene all night to secure the area. "Until he comes home ... they'll be there with him," he said.

Body of missing diver found

http://www.boston.com/dailynews/072/region/Body_of_missing_diver_found_:.shtml
3/12/2004 By Mike Recht, Associated Press,

LACONIA, N.H. (AP) Divers on Friday recovered the body of a Laconia Fire Department diver who disappeared during a practice exercise in Lake Winnipesaukee.

The body of Lt. Mark Miller, 43, an 18-year veteran, was found around 1 p.m. Scores of firefighters who helped search for him formed a double line on a dock and saluted as colleagues carried a flag-draped stretcher to a waiting vehicle. Miller, head of the department's diving team, disappeared Thursday afternoon while trying out new diving suits in the icy lake with a fellow firefighter.

Fire officials think he may have gotten disoriented and become trapped under the ice. Crews drilled numerous holes through nearly 3 feet of ice on the lake, allowing divers and underwater cameras to search for Miller.

More than 20 divers were in the water Friday morning. Crews also walked on the ice and a State Police helicopter flew over the lake. ''Mark was a very, very experienced diver,'' Laconia Fire Chief Ken Erickson said.

Miller, who was testing out a new diving suit, and his partner indicated to each other under the water that they would head up, officials said. But the other diver came up alone.

Erickson said that, even though Miller had a compass on his suit, he probably came up under the ice and couldn't get out. Miller and his partner were not wearing safety tethers because they did not intend to go under the ice, Erickson said.

Rescue crews and divers from throughout the Lakes Region responded to an emergency call for help and searched the water until darkness Thursday, before resuming Friday morning.

The site is near the pier the Mt. Washington cruise ship uses in summer and fall. Gov. Craig Benson visited the site Friday morning and said the state is ''blessed'' to have so many hardworking firefighters. ''On a beautiful sunny day like we had today, it is easy to stray beneath the ice,'' Fish and Game Maj. Tim Acerno told The Union Leader on Thursday. ''The sun shines right through it and you can't tell the difference between it and the open water.'' Acerno said some veteran divers hesitate to dive beneath the ice because it is so easy to become disoriented.

Miller was married and has three stepchildren. ''We're a big family, here to support each other,'' Erickson said, choking up.

Body Of Missing Diver Found
Firefighter Disappears During Training Dive

March 12, 2004

LACONIA, N.H. -- Divers on Friday recovered the body of a Laconia firefighter who disappeared while during a practice exercise in Lake Winnipesaukee.

The body of Lt. Mark Miller (pictured, right) was found around 1 p.m. Scores of firefighters who helped search for him formed a double line on a dock and saluted as colleagues carried a flag-draped stretcher to a waiting vehicle.

Miller, head of the department's diving team, disappeared Thursday while trying out new diving suits in the icy lake with a fellow firefighter.

Fire officials think he may have gotten disoriented and become trapped under the ice.

Diver found after lake accident

March 13, 2004 By PAULA TRACY Union Leader Staff

LACONIA, NH — Under the frozen surface of Lake Winnipesaukee, divers yesterday afternoon located the body of a Laconia fire lieutenant, almost 24 hours after a department-authorized practice dive with new suits went horribly wrong.

The search drew firefighters and divers from across New Hampshire and the Boston area. The body of Lt. Mark Miller was found about 1 p.m.

Scores of firefighters formed a double line on a dock and saluted as colleagues carried a flag-draped stretcher away.

An experienced diver and the founder and head of the Laconia department's dive team, Miller, 43, of Laconia was with fellow firefighter J.P. Hobby testing new dive suits in an open water area when he disappeared. He was near mooring space for the cruise boat the MV Mount Washington about 2:30 p.m. Thursday. He was last seen giving the thumbs up to Hobby to surface.

Hobby surfaced but Miller did not. A furious effort to find Miller ensued. He was wearing tanks holding a maximum of 30 minutes of air, and hours after his disappearance the rescue slowly turned into a recovery effort.

Michael Nalen, a dive master from Divers Den in Manchester, located the body. State Fish and Game Lt. Robert Bryant said Nalen located the body at 12:50 p.m., several hundred feet from the edge of the ice. It was on the bottom of the lake in about 20 feet of water. Fish and Game divers recovered

the body a few minutes later.

An autopsy is scheduled by the state's medical examiner today in Concord, and the dive suit and equipment are being examined to check for equipment malfunction, Bryant said.

Bryant said the suit was relatively new; he did not know how familiar Miller was with it.

There was nothing evident from the body or its location to lead investigators to know what went wrong, Bryant said. "We will never know for sure what really occurred," Bryant said. "We knew they did not intend on being under the ice. Their intent had been to stay in the open water," and they were not tethered to each other in any way.

Fire Chief Ken Erickson thinks Miller may have gotten disoriented and became trapped under the ice. Even though Miller had a compass on his suit, he probably came up under the ice and couldn't get out, Erickson said.

Ice was 2 feet thick in some places. "He would've been proud of what went on here today," Erickson said. "He was very proud of his dive team."

Pat Foley, one of 11 divers from the Boston Fire Department who searched for Miller, said he believed Miller had enough air in his tank when he last saw his diving partner, about 40 feet from open water.

Foley said the two last saw each other near an old ship boiler at the lake bottom. It's possible the metal boiler may have thrown off the compass, he said. Some 25 divers were on hand yesterday to assist in the recovery effort. "I will say it went more smoothly than expected given the number of outfits that were there," said Bryant. "Safety was first and everyone worked well together. I was very, very impressed with how everyone worked together."

The water was clear, with water temperatures in the 30s and visibility less than 20 feet.

Holes were punched through the ice, and lights and cameras were dropped in an attempt to locate the body.

All night Thursday and into Friday morning, police and firefighters scanned the open water in the area of the Weirs Channel, looking for the body, if it surfaced.

Gov. Craig Benson attended a 7 a.m. briefing for divers at the Weirs Beach Fire Station. Benson talked to Miller's family and said the state is "blessed" to have so many hardworking firefighters.

"Something must have really gone wrong," said Boston Fire Chief Curt Holzendorf, chief of special operations. He predicted that hundreds of firefighters from the region will attend services, which have not yet been scheduled.

"There is a sense of closure to this now," said Laconia Police Chief Thomas Oetinger, who knew Miller for most of Miller's 17 years in the Fire Department. Miller was "always in a perpetually good mood,"Oetinger said.

"He was a sincerely nice, good guy. At a fire scene, a medical emergency, an accident, he would do whatever he could do to help others," Oetinger said.

Word of Miller's death rekindled sad memories to Manchester Chief of Training Richard Martel, who recalled the death of firefighter David Anderson in a Manchester apartment building fire in December 2000. "Our heart goes out to them," he said of the Laconia department. "We had to go through this just a few years ago. It is just traumatic for everyone."

Four members of the Manchester Fire Department headed to Lake Winnipesaukee yesterday to join in the search from land, by boat and do whatever they could to help assist. Nationally, between 100 and 120 firefighters die annually and an estimated 12 to 15 percent die in training related incidents, Martel said.

Manchester used to have a dive team but cut it from the budget. The city now relies primarily on state Fish and Game for search and rescue in water.

For many departments it is a matter of costs, with the suits themselves costing nearly $2,000 each, not to mention underwater communications equipment and training, Holzendorf said.

Laconia is surrounded by lakes and has many boating, swimming and snowmobile incidents to deal with each year. Miller was remembered for his love of diving and extending his love of assisting others through his diving. He founded the city's dive team and it was his special interest, friends said.

Miller was married and has three stepchildren.

"We're a big family, here to support each other," Erickson said, choking up.

Fire Chief: Report On Diver's Death Gives No New Information

HTTP://WWW.FIREHOUSE.COM/NEWS/10512436/FIRE-CHIEF-REPORT-ON-DIVERS-DEATH-GIVES-NO-NEW-INFORMATION
AUG 24, 2004

LACONIA, N.H. (AP) -- A long-awaited Marine Patrol report on a skilled firefighter-diver who drowned earlier this year in Lake Winnipesaukee gives little insight into what happened, city fire officials said.

``Its pretty inconclusive. ... Weve waited five months and it really didnt shed any new light on what happened,'' Laconia Fire Chief Ken Erickson said about Mark Miller. The patrol released the report to the fire department on Friday. Miller died on March 11 during a routine training exercise in the icy lake. Miller and another diver were trying out new diving suits.

Medical examiner determinations found no extenuating circumstances in the drowning. Erickson said the new report does little to indicate what procedural or equipment problems could have contributed to the tragedy.

``Mark was a 43-year-old man who was in excellent physical condition and we still don't know why he drowned,'' he said. ``They were unable to come up with a conclusion. All it did, in my mind, was identify new questions.'' . An autopsy and toxicology tests showed neither a medical condition nor substance caused Millers death.

Erickson said the report does bring up ``concerns'' about the neck-size of the ``dry-suit'' being worn by Miller during the time of his death. Erickson said the inquiry raises concerns that the neck could have been too tight. Other questions were raised about the position of valves on the suits, according to the chief.

However, Erickson said Miller had worn the suit eight times before the drowning and for periods of up to close to an hour.

The suit Miller wore could be sent to the U.S. Navy dive-team as part of a secondary investigation of what possible equipment failures could have led to his death, Erickson said.

Representatives from the National Institute for Occupational Safety and Health visited last week as part of their investigation, he said.

The agency works under the federal Department of Health and Human Service's Centers for Disease Control and Prevention. The agency studies work-related illnesses and injuries, including those suffered by emergency workers.

Erickson said one thing that didnt surprise him about the report is that it identified no procedural wrongdoing by Miller. Some have speculated, though, that Miller would be alive if he had been tethered to his partner, as is standard procedure in dives going under ice.

However, Erickson said Miller and his partner were in open water off the docks when the incident occurred.

``There was no intention of going under the ice ... unfortunately that is something we will never get an answer on,'' Erickson said.

Information from: The Citizen

Gilford firm donates dock in honor of fallen firefighter

http://www.citizen.com/December_2004/12.03.04/news/gilford_1203_04a.asp
12/03/04By GEOFF CUNNINGHAM Jr. Staff Writer

LACONIA — A crew from Watermark Marine Construction is finishing a project that will provide a dock for the state-of-the-art fire/rescue boat dedicated to the memory of fallen firefighter Mark Miller.

The Gilford-based dock company has donated the landing, which will sit on Paugus Bay at the Laconia Water Department. According to Fire Chief Ken Erickson, the completion of the dock is a "major component" to the completion of a project that represented Miller's dream of establishing a full dive/water rescue team.

Miller, a 17-year veteran firefighter, was the lead diver for the department and had been working toward the establishment of such a team when he died in March during a dive training accident off the docks at Weirs Beach. After his death, an effort began to honor Miller's memory by raising funds for a new city rescue boat.

In August, the department was able to dedicate a 21-foot Edgewater Center Console boat in Miller's name after a major community effort saw an $80,000 boat obtained for approximately $36,000 thanks to many donations.

Alan Lydiard of Irwin Marine was among those who headed the effort to make Miller's dream a reality. He said the installation of the dock is yet another step in what has been a long process of honoring a man who was dedicated to saving lives.

Lydiard praised Paul and Mark Goodwin, the owners of the dock company, for their donation and their work in getting the project through the permitting process. He also gave credit to Gov. Craig Benson, who he said was "very instrumental" in expediting approval on the state level.

The rescue boat is currently out of the water at Irwin Marine(located next to the Laconia Water Department) being fitted with new equipment. When this winter's ice melts it will permanently be stationed at the new dock.

Erickson said the dock will allow the 200-hp boat to be utilized from a location that will allow quick access to one of their busiest areas of water. "From our perspective this is ideal. Its close to our center station and its in Paugus Bay, which is our busiest area," said Erickson.

Like Lydiard, the chief thanked Watermark Construction for what he described as a "huge financial donation."

Geoffrey Cunningham Jr. can be reached by calling 524-3800 ext. 5931 or by e-mail at gcunningham@citizen.com