

March 30, 2003

A Homeland Security Tool

A True Story

The following report on the 9–11 tragedy that appeared in the November 2001 issue of *"WorkBoat"* magazine points out that a disaster of one origin can lead to emergencies of differing types.

The article reported that shortly after the south tower of the World Trade Center collapsed on September 11th thousands of frightened people fled toward the waterfront to escape the choking dust. About 25 minutes later, the north tower fell. By then, the evacuation had begun in earnest. The New York Police Department's Harbor Unit and the Coast Guard immediately put out emergency radio calls for all vessels to come to the vicinity to begin transporting people out of the area. Virtually every kind of small vessel in the port responded. A huge fleet comprised of tugs, ferries, sightseeing vessels, police launches, fireboats, and Coast Guard rescue vessels, all seven Corps if Engineers New York District vessels and a smattering of recreational craft converged on the Battery Park area (located a few blocks south of the World Trade Center at the tip of Manhattan).

"When the buildings came down there was a mad rush of people heading for the water," said USCG Chief Petty Officer Brandon Brewer, who was on duty that morning at the agency's Battery Park building. "They were running through the park, hurdling the benches and picnic tables."

Soon, several dozen tugs had arrived and lined the seawall from one end to the other, side by side. "It was pretty awesome to watch," said Brewer. "The tug crews built homemade signs and hung up sheets they had spray painted from the railings so people would know what boat was going where. The captains and their crews were on the dock with the police officers and firefighters directing everyone on to the boasts. I think it was very calming to people that they would arrive and be told where they needed to go almost right away"

The visibility was extremely poor, especially on the downwind side. "You could only see about five feet ahead," said Captain Gordon Young of the "Seastreak Liberty". "We had to come into the pier using radar. It was really bad." Seastreak, based in Highlands, N.J., responded with all four of its fact commuter ferries and by day's end had transported about 3,000 people.

At one point, a police officer asked Young how many people the Liberty could carry. "We were at about 200 at that point, so I had room for about 100 more. Then they said to leave a few spots open because there were people who were panicking and jumping into the water at Battery". *Fortunately, the Coast Guard and police boats were able to pluck everyone out of the water.*

Water Emergency Scenarios

As Homeland Security decision makers go through the process of risk assessment and planning, mitigation, preparedness, response and recovery the potential for having to rescue people from the water must be considered as inevitable. As evidenced by the 9-11 disaster, an



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emergency totally disassociated with water can require a response to people in the water in need of rescue.

There are obviously scenarios which will necessitate water rescue. Three such situations include an act of terrorism which destroys a dam causing flooding of a heavily populated area; another would involve the destruction of a bridge resulting in vehicles and pedestrians falling into the water below; and a third scenario would see a ferry boat sinking or an aircraft or bus crashed into a body of water.

The focus of Homeland Security is on:

Risk Assessment and Planning Mitigation Preparedness Response

for disaster events including terrorist attacks and including chemical and biological releases, wildfires, floods, epidemic spread, and hazardous material spills.

Risk Assessment and Planning

Risk Assessment and Planning includes assessing the hazards, risks, and probability, as well as a determination of mitigation, preparedness, response, and recovery needs. This includes identification of potential water-emergency management problems and the initial planning for response to any possible incident. Key to a successful response is detailed information concerning potential risk, hazards and personal protection needs.

Mitigation

Mitigation includes long-term activities designed to reduce the effects of unavoidable disaster. Agencies and organizations at the state or regional level are often responsible for supplementing mitigation activities and secondary response support to local governments where disasters and emergencies occur.

Preparedness

In the Preparedness phase, governments, organizations, and individuals develop plans to save lives and minimize disaster damage (for example, compiling federal/state resource inventories and mounting training exercises). Local government agencies are responsible for initial planning and response to emergency incidents, disasters, and terrorist events.

Response

Responses are the activities following a terrorist event, emergency, or disaster which are designed to provide emergency assistance for victims (for example, search and rescue, emergency shelter, medical care, mass feeding), as well as to speed up recovery operations. These tasks and activities are the responsibility of federal, state and local agencies involved with Homeland Security.

How the Tool Fits

LIFE-SAFER, INC. is targeting Homeland Security decision makers who are responsible for risk assessment and planning at federal, state and local levels to assure that they understand that the *PERSONAL RETRIEVER*[™] is the ideal response tool for emergencies involving water rescue and should be considered and included as essential equipment no matter the type or cause (terrorist attacks, chemical and biological releases, wildfires, floods, epidemic spread, and hazardous material spills) of the emergency.

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The inevitability of emergency situations involving bodies of water contaminated by biological and/or chemical hazards with people in the water in need of rescue can prove to be a difficult situation for on-scene commanders. As a Homeland Security preparedness tool, the *PERSONAL RETRIEVER*[™] will allow the first-responder to a disaster to deliver buoyancy, create stability and effect recovery of those who are in the water without having to enter the water. Providing the first-responder with this new water rescue response tool may relieve the burden placed on advanced rescue teams. While providing buoyancy to the person, they can continue floating until the rescue team is able to recover them in a controlled and deliberate manner.

This means that for government agencies and organizations to be properly prepared; equipped and trained for all emergency situations this new rescue tool must be available and personnel must be trained in the proper application and use of the device.

The intended use of the *PERSONAL RETRIEVER*[™] is to allow the first-responder to emulate the functions of the lifeguard without placing their life in jeopardy. This tool will enable the people on scene to effectively sustain the survival window of those in the water while awaiting the arrival of more advanced rescue resources. Having a response tool that delivers buoyancy, creates stability and allows the first-responder to effect rescue reduces jeopardy for all involved and such a tool will be prove to be a force multiplier in an environment where trained personnel are scarce.

Another True Story

Joseph W. Dupras, Sr. of *LIFE-SAFER, INC*. was conducting training of the Lawrence Fire Department with the city's newest ice rescue tool - donated by *LIFE-SAFER, INC*. to the Lawrence Departments of Police and Fire after the December 14th tragic drowning of four youths – when the call came in that two Lawrence police officers had fallen through the ice on the Merrimack River. Mr. Dupras responded with the fire rescue team. Lawrence police officers Brian Voisine and David Moynihan and Mr. Dupras put the Frisbee-like disks to use saving the two police officers and another man who had fallen into the river.

Sergeant Michael McGrath and Officer Daron Fraser fell through the ice while attempting to rescue Henry Hernandez, 32, who ended up in the frigid Merrimack River trying to save a dog. Another man, who left the scene without giving his name, also fell into the water, but got to shore with minimal assistance. Also, one rescuer fell in during the operation but was pulled out uninjured. "Fraser, McGrath, and Hernandez were treated for hypothermia at Lawrence General Hospital and released", said police spokeswoman Ellen Murphy Meehan who said, "Hernandez was in the water the longest, less than 10 minutes".

The accident scene was almost directly across the river in South Lawrence from where Victor "Ricky" Baez, 9, William Rodriguez, 11, Christopher Casado, 7 and Mackendy Constant, 8, died December 14, 2002.

Background information

1) Worldwide approximately 500,000 people annually, loose their lives to drowning.

2) Every year since 1979, the United States has experienced 5,000 drowning deaths.

3) Three percent of the lives lost are of those attempting to make the rescue.

4) The majority of drownings are over in 60 seconds or less.

5) The rescue devices currently available both lack reach or buoyancy and can be cumbersome and difficult to deploy.

6) Most drownings occur in remote areas.

7) What has been needed for years is an effective device that can deliver adequate buoyancy beyond the death zone (30-70 feet off shore) and facilitate rapid rescue (recovery) of the victim.

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New Homeland Security Tool

LIFE-SAFER, INC. is working to implement a new strategy as an effective means of extending the survival window or effecting the rescue by using a new technology. The *PERSONAL RETRIEVER*[™] is a compact, rapidly deployable and non-injurious design, which combines sufficient reach and buoyancy. This tool is specifically engineered to keep the first-responder out of the water while improving their ability to safely respond to a water emergency.



The *PERSONAL RETRIEVER*[™] ready for use. Lieutenant Brant Bass of the San Diego Lifeguard Service performs a textbook throw of the *PERSONAL RETRIEVER*[™] into San Diego's Mission Bay.

PERSONAL RETRIEVER™ specifications:

- Reach: 100 feet
- Buoyancy: 12 pounds*
- Deployment time: 10 seconds or less
- Re-deployment time: 45 seconds or less
- Material: Soft Expanded Polyethylene Foam Top and Propylene Base
- Diameter: 17 inches
- Weight: 1.5 pounds
- Training Time: One hour or less
- Rope: 650 pound test buoyant 3/16 inch polypropylene
- Design: Aero-dynamic and hydro-dynamic rotating wing
- Wind penetration: Full extension into 15-knot winds
- Coating: Petroleum resistant plasti-coat
- **PERSONAL RETRIEVER**[™] is \$89.95 plus S & H Pouch \$19.95 (sold separately)

* The US & UK accept 50 Newton / 11 pounds of buoyancy now required in the Type 50 Buoyancy Aids as sufficient to keep a conscious person afloat.

For more information, visit us at www.life-safer.com or (619) 222-3467