



# Vails Gate Fire Department Quick Drill

*Train like your life depends on it.*

## The Buoyancy of Bunker Gear

2010-2



Over the last few years I continually hear the statement, “You can not wear bunker gear near the water because if you fall into the water the gear will weigh you down and you can drown.” This statement has been told, like an old wise tale, over and over again to the point where it is accepted, by most, as fact. The problem that exists with this wise tale is if for some reason a catastrophic incident occurs and you find yourself in a body of water with your bunker gear there is a good possibility that you are going to panic to rip your gear off because of accepting this wise tale as fact.. When firefighter enters a state of panic he is no longer thinking clearly and chances are this will have an adverse affect on the outcome of the situation.

I am not advocating unnecessarily wearing bunker gear near a body of water, like a water rescue, but there will be times when you will have to wear bunker gear near a body of water. For instances, a boat fire, marina fire or possibly building fire which contains an indoor swimming pool.

**In 1999 the Middle Hope Fire Department responded to a structure fire in a large house. While doing a primary search a firefighter, wearing his bunker gear and scba, fell into an indoor swimming pool. Although he was wet, he was able to successfully remove himself from the pool**

**This incident is an example of the possibilities that you may find your self working next to a body of water with bunker gear.**

In 2007 the City of Newburgh Fire Department performed several tests regarding the buoyancy of a firefighter in bunker gear with and without a self-contained breathing apparatus (scba). The results of this test contradicted the wise tale and proved that a firefighter with bunker gear, with and without an scba, will be buoyant and will float easily.

View the following tests that were performed by the City of Newburgh Fire Department at:

[http://www.youtube.com/watch?v=mNLzu\\_mdWNQ](http://www.youtube.com/watch?v=mNLzu_mdWNQ)

The following steps should be taken if you find yourself in the water while wearing bunker gear:

- 1) Immediately rollover onto your back, allow your boots to surface.  
*Surprisingly, it was found that your boots will contain a large air pocket which will assist in keeping you buoyant.*
- 2) Remove any tools that you might have in your pockets that could weigh you down.
- 3) Remove your helmet and place it top up in the water against your chest and use this as a flotation device.  
*The space inside the helmet will create an air pocket*