

**Presenter Bio:**

**Kelly Byrne** is a 26-year veteran of the fire service. He works for the Washington DC Fire Department and is a driver for Rescue Squad 2. The primary mission of the Rescue companies in Washington DC is the search and rescue of trapped civilians and firefighters at building fires. They are also responsible for HazMat response, trench and building collapse, confined space rescue, vehicle extrication, water and ice response, high angle rescue, and Heavy Wrecker operations in the Nation's Capital.

How do you know when someone is a SPRAT L3? Don't worry, they'll tell you. Kelly is a SPRAT L3 and is the owner of Rescue 2 Training.

Kelly lives in West Virginia with his wife, Kelly, and daughters, Corrina and Jillian.

**Abstract:**

This presentation will look at the forces placed on the legs of an Arizona Vortex artificial high directional when used as an elevated anchor. Forces will be measured in a static configuration, as well as during the lowering and raising of a load. This will be accomplished by placing button load cells inside the legs to gather information on the compressive forces being generated.

It is hoped that this information will allow people (in particular, the presenter!) to have a better understanding of the forces being applied to Vortex during actual use.

Additionally, the hardware and method used to collect this data will be discussed in an effort to show that even a Luddite firefighter is able to collect data relevant to the circumstances in which he is called to operate.