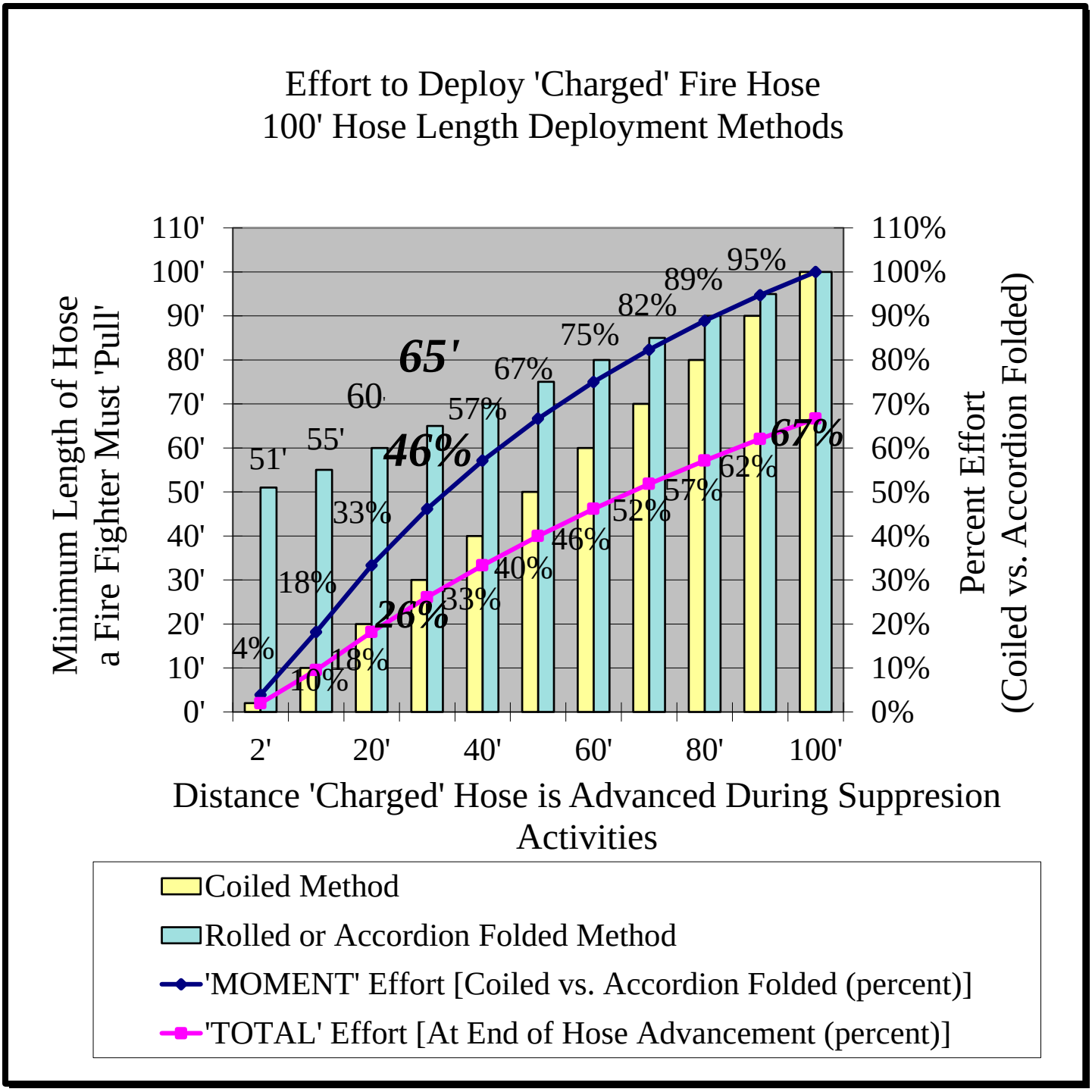
Effort to Deploy Fire Hose

'Bundle' (Coiled) vs. Folded/'Double-Donut' Rolled

'Moment' and 'Total' Energy Expended/Required



The purpose of this graph is to mathematically prove the advantages of utilizing the Laws of Physics that apply to a basic garden hose found 'coiled' at its water supply (faucet) also applies to ALL fire hose in that the 'Moment' energy and 'Total' energy to deploy two (2) basic methods are fully illustrated and compared.

The two (2) basic configurations include first, the traditional and most popular 'minuteman' or 'triple-fold' flat load or 'double-donut' roll (100') that requires literally every fold (to fit within an specific compartment or cabinet on fire apparatus is then a pre-engineered water restrictive kink) that MUST FIRST always be painstakingly unfolded before the first drop of water is adequately pressurized to produce the necessary Nozzle Pressure (NP) for firefighter SAFETY. The second (and least popular?) is the 'Coiled' method (i.e. Cleveland, Gnass, etc.) that can be fully charged literally in mere seconds… within feet of is pressurize source… and especially even in confined spaces in which ZERO manipulation of the hose is ever required to secure FULL Nozzle Pressure (NP) at literally every stage of deployment… from within feet of a fire apparatus… up to the full length of the hose. [**http://HoseRoller.net**]

Please carefully identify each component of this graph. The ***BLUE BAR*** graph illustrates the typical 50' 'tail' of hose that is dragged behind a firefighter when advancing/pulling a 150' 'pre-connect' or 'Live-Line' of folded hose or the minimum of 50' behind a 100' 'Double-Donut' roll of hose that is (stupidly) unrolled, in reverse, back down the very hill just traversed.

The ***YELLOW BAR*** illustrates the 'tail' of hose that is dragged behind a firefighter when advancing/pulling 100' of hose from a 'high-rise' or wildland ('Cleveland'/Gnass) 'Bundle' or the last 100' of hose of any (properly) prepared coil configuration pre-connect a firefighter must pull to advance from the location in which a hose bundle is simply dropped on the ground and CHARGED! …no matter where the 'Bundle' is placed during the deployment process as I demonstrate in scene #1: AFTER walking around a parked car and then walking through into one (1) bay door to exit a second/adjacent garage/bay door, thus fully wrapping the solid post between each, the hose is then FULLY charged… with NO KINKS… and then deployed to its full length in less than 40 seconds… never pulling any more charged hose than what I ever needed from the moment the hose was pressurized up to its full length. And only ONE (1) firefighter to accomplish this entire evolution but in record time!

Any other hose-load configuration (Flat-Load, Triple-Fold, modified Minute-Man) with any tail whatsoever would immediately cease all forward progression at the first right-angle turn at the first rear tire of the car. But instead, I demonstrate an EFFORTLESS deployment that simulates advancing up to the point of entry into a burning building, and near effortless advancement of fully charged line into the building, with full nozzle protection at every step of the way to a fire victim, while simultaneously creating an excellent indicator for emergency egress (follow the hose back to SAFETY) by the shortest distance out of the danger zone. In other words, a hose 'bundle' can be advanced DRY and with NO effort to a point at which water is finally necessary for the protection from and suppression of the fire. As long as the hose is coiled to its 'Minimum Critical Inside Diameter' for all kinks to be prevented, it can then be fully pressurized in mere seconds from the moment the pump panel valve is opened.

The ***BLUE LINE*** graph illustrates the amount of ***MOMENT EFFORT*** given as a percentage in effort/energy to simply advance/pull any hose at any one point in the deployment process given at a specific distance when comparing the 'Bundle' method vs. that of a folded/rolled method. The ***BOLD*** example upon advancing **30' of 'COILED' hose [*YELLOW BARs in a triangular illustration*] is *46%* of the effort to pull the same charged hose, but because it is folded or rolled to always have at least a 50' tail, it is compared to the 65' length of folded/rolled hose** [***BLUE BAR***] that is being dragged at that 30' foot distance from the point at which the hose was first charged.

The ***MAGENTA LINE*** graph illustrates, as a percentage also, the comparison of ***'TOTAL'* EFFORT OF THESE COMPARED HOSE ADVANCE** evolutions of the Coiled 'Bundle' Method vs. that of the folded/rolled method from the point of commencement. The coiled method at 2' feet is 4% of the moment effort, at 10' feet it was 18% of the moment effort, at 20' feet it was 33% of the moment effort, and at 30' feet it is 46% of the moment effort…

***…but what is key is the TOTAL EFFORT from start to finish. The TOTAL EFFORT of the entire evolution, when you measure the SURFACE AREA under all* YELLOW BARS**

compared the SURFACE AREA under all the corresponding BLUE BARS, it is then, therefore, evidenced the TOTAL EFFORT from zero (0') to 30' only 26%!

Hence, in the same way, that the video at **http://HoseRoller.net** [and **http://HoseCabinet.com**] demonstrates that one firefighter can do the same work as four (4)… in one quarter (¼) the time… and a quarter of the effort… and with absolutely NO water restrictive kinks EVER! The graph above is the mathematical evidence this evolution of deploying hose from a coil configuration is exactly as all claims are demonstrated as far more efficient than most are even aware, let alone could ever imagine!

The choice is yours! Fold that long flat stuff on that horse wagon… that motorize cart… that $750,000.00 PIERCE! Are you such a traditionalist that you cannot be open-minded to what technology mathematically proves!?! Truly, is there any other method that produces such an incredible calculated and documented result… EVER!?!