

NFPA (<http://FireWiser.org>) Presentation Bio:

Richard W. Hoffmann is a medically retired Correctional Fire Captain upon service spanning over 20 years for the State of California. He's a twice patented inventor, Fire and Haz-Mat Specialist Instructor, television broadcast show host, and five (5) time entry into Marquis' Who's Who in America. In 2021, he was interviewed before 24 million listeners on BlogTalkRadio.com, recognized as the only inventor of a mechanical calculator in the 21st century and for his contributions to be <http://FireWiser.org> to exponentially improve child, firefighter, and all fire victims <http://FireAndLifeSafety.org>.

In 2006, Texas A & M University Fire School Dean of Students requested the copyright to instruct all international attending fire personnel on Mr. Hoffmann's video content at <http://HoseRoller.net>. A revolutionary fire hose deployment methodology that exponentially improves firefighter safety in that any 'bundle' or 'pre-connect' attack hose line can be immediately utilized within feet of an apparatus, within seconds, and with zero water-restrictive kinks EVER! 'Garden hose' technology to create the first-ever and only functional <http://HoseCabinet.com> in history. Each function is achieved from the only hand-operated hose roller that rolls fire hose as small as 50' of 5/8" 'Peanut Line' and up to 100' feet of 5" inch diameter LDH in the field that also quickly transitions into an 8:1 mechanical Advantage <http://RescueWinch.com>. A complete rescue system that is capable of belaying (NOT dangerously rappelling) up to four (4) rescuers and two (2) rescue baskets hundreds of feet over a cliff to multiple victims who will be raised curbside potentially well within their "Golden-Hour" before Medivac arrives!

His presentation exemplifies why he is a top expert in assisting firefighters and fire victims with how to <http://OutThinkWildfire.org> upon his home <http://ExteriorFireSprinklerSystems.com> to be that much more NFPA <http://FireWiser.org>. A system designed to ensure a 3,000-gallon/11,300 Liter cistern tank will last for hours as though it is ten (10) times the volume upon phone app and heat sensor auto-activation. Reliable permanent independently Solar Powered electric pumps that can be Satellite internet operated to spray atomized water droplets on and adjacent to any structure to ensure <http://WetHomesDontBurn.com>. Result: Exponential reduction of life and property loss. In the aftermath of an earthquake, a system that, when water mains rupture and are no longer serviceable, especially a backyard pool, can be a critical alternate pressurized water source to the curb to assist in the firefight like never before.

As the author of 'Wildland Fire Hydraulics – Myth or Math' (at <http://HydraulicsBook.org>), he shattered the record for any book copyrighted by the U.S. Copyright Office by half! A world's first manuscript written from the private sector to articulate every detail of the world's first-ever and only Wildland <https://HydraulicsApp.com> in Android and iOS versions. Additionally, as a critical safety backup when every phone dies, he created the world's first-ever <http://HydraulicsSlideRule.com> and the only mechanical calculator designed in the last 50 years. A hand-held device that fits in any glove box of any wildland fire apparatus to estimate 'TOTAL' Wildland Fire Engine Pressure in seconds as well. Finally, accurately estimated compensation of all Friction Loss, Nozzle Pressure, and HEAD pressure losses to ensure "an effective fire stream at the rated flow of the nozzle." (NFPA 1002 – Chapt. 8 – Wildland Fire).

Given that 'REAL-TIME' results are necessary to ensure firefighter safety at all times, Mr. Hoffmann recently discovered a fast, easy, and accurate <http://HandHydraulics.com> methodology to determine wildland fire Engine Pressure (EP) when no other technological tools/instruments are available. Just as the visual of one's left hand has been used since the 1950s to estimate Friction Loss (FL) for each GPM-affected hose length for structural firefighting, the same procedure can now be used for wildland

firefighting. But only simpler! Upon assigning the '**TOTAL**' Friction Loss and Nozzle Pressure losses (as though on flat ground) to each finger in either '**Standard**' or '**HENway**' hoselay configurations (below), estimated HEAD pressure remains the only component to be added. Estimated '**TOTAL**' Engine Pressure (EP) is also accurately determined in mere seconds. Only the contour lines found on a USGS digital or hardcopy map are necessary to meet this final criterion.

His research inspired <http://HENway.org>. – A 'dual' hose lay (1/2 water flow per line) methodology reduces the Friction Loss (FL) component by 75% to accomplish two (2) goals: First, allow nozzle flow to increase 25% from 60 GPM to 75 GPM at 56% more effective "Knock-Down." Second, by comparison to the '**Standard**' methodology, this hoselay can be extended 500' at 83% farther and pump water 639' higher in HEAD (-288' downhill vs. 351' uphill) at 1,100' on any 32% grade that meets NFPA 1002 and NFPA 1051 requirements upon strict adherence to NFPA 1041.

Mr. Hoffmann is also the only developer of the world's first-ever <https://WaterTenderApp.com>: A phone app to accurately estimate the correct number of water tenders to order and the minimum portable storage tank capacity to meet fire flow needs. Universal in both GPM/LPM for international application delivery rates necessary to support any incident accordingly. Never before has a 'tool' been available to manage multiple resources to prevent the risk of both water supply/flow interruption nor over-ordering these resources to cause a shortage in a neighboring jurisdiction(s) in the event of a simultaneous incident with the exact needs.

Lastly, Mr. Hoffmann is the Founder of the 501(c)3 nonprofit to ensure <https://EveryoneGetsHome.org>: A foundation that fills the gap for our First Responders and Military Personnel <http://FallenFiance.org>. Unfortunately, due to a simple nonexpired date on our calendar, not only does each '**spouse-to-be**' suffer the identical incredible personal loss of their loved one but incredible financial loss as well! Why? ZERO Death Benefits on a mere technicality! So I challenge you to step up to the plate and consider what the Secretary of State of Oregon approved, not in the typical 2 ½ week review period, but only 2:33 minutes!

Yet on a much lighter note, please enjoy Mr. Hoffmann's artistic expression as a featured artist at his City Art Center, Ankeny, IA in June 2011. Please enjoy: <http://RHphotographics.com>