

Newsletter



Hall of Flame Museum of Firefighting
Volume 17, No. 1 Spring 2006

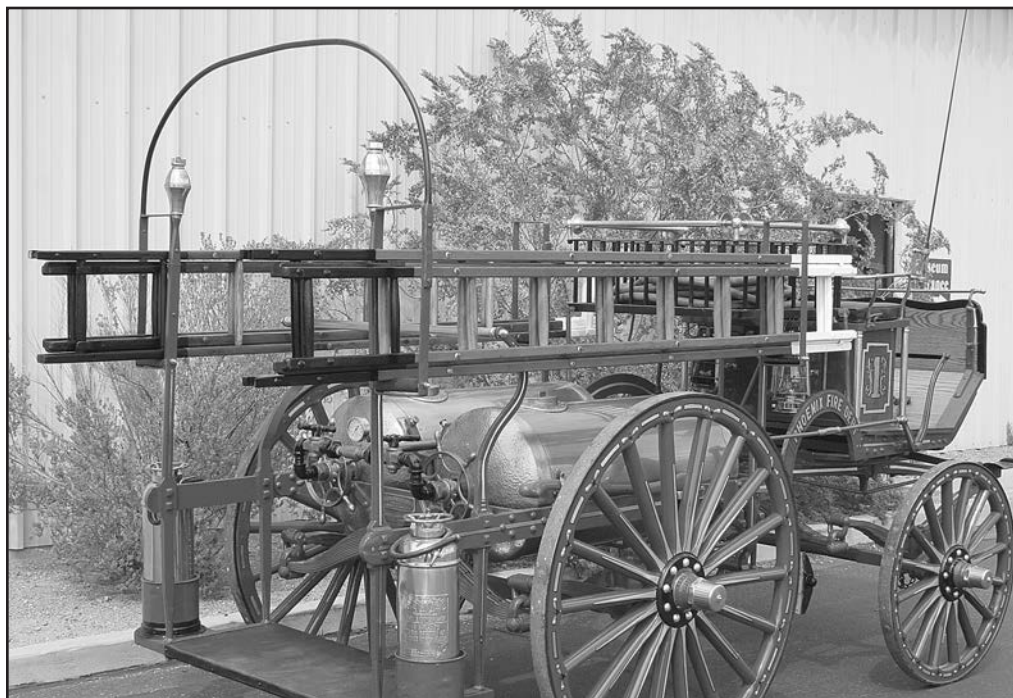
Restored Phoenix Chemical Engine Returns to Exhibit in Wildland Firefighting Gallery



After several months in Don Hale's restoration shop the museum's horse drawn chemical engine was rolled into the parking lot to be photographed. The rig served the Phoenix Volunteer Fire Department for 6 years.

The rig's original builder is a bit of a mystery. The nameplate is that of the Anderson Coupling Company of Kansas City, Missouri. This firm sold hose and patent couplings, but not pieces of apparatus. It was sold by that firm to the Phoenix VFD in 1908 and used by the volunteers until 1914, when it was replaced by a pair of Seagrave chemical cars that also served to pull Phoenix' two steam fire engines around town. The rig is identical in style and equipment to the chemical engines built by the Chicago based Fire Extinguisher Manufacturing Company during the 1880s. It is possible, and possibly even likely, that The engine was built by FEMCO in the 1880s or 90s and refurbished by Anderson Coupling.

The engine has a pair of forty gallon copper tanks of the Champion style. At a fire they were inverted on their longitudinal axes, allowing the stopper of a lead acid bottle to open and mix a quart of sulfuric acid in the mixture of water and several pounds of sodium bicarbonate. This filled the tanks with carbon



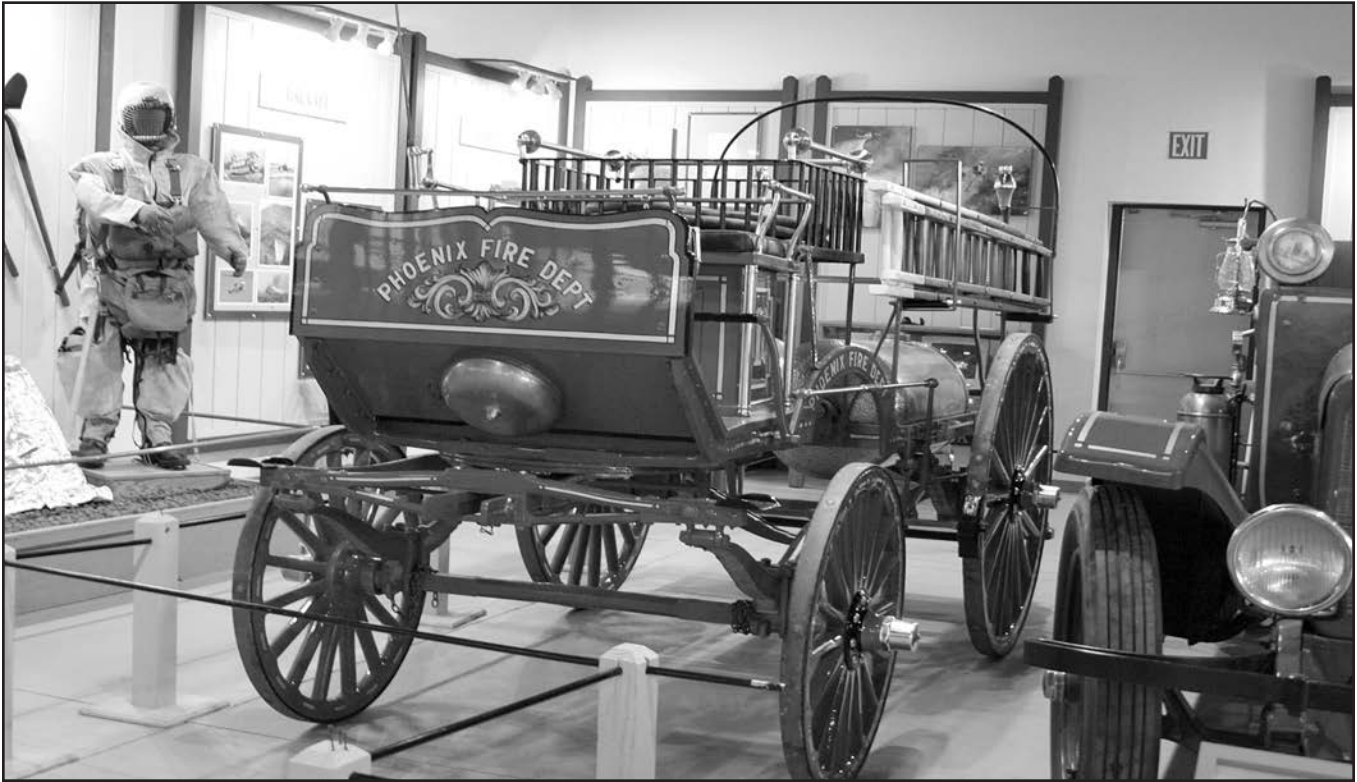
Above: View of tanks, extinguishers, ladder racks and torches.

Below: Don Hale (right) and George Batsche pose with rig. George is a museum volunteer who helped Don considerably with the restoration.



dioxide gas at about 100 pounds per square inch, which propelled water from each tank in succession to a

hard rubber hose of 1/2 to 3/4 inch diameter. A nozzle with a 1/4 inch diameter and a shut off valve allowed a



The engine is on display in the museum's wildland firefighting gallery. It was commonly used to attack brush fires.

fireman to play an intense but small stream of water onto a fire. In addition to this eighty gallon water capacity, the engine carries two 3 gallon soda-acid portable extinguishers and a pair of small extension ladders. Firemen rode the rear step, hanging onto an iron hand rail that also served to hold one of the ladder racks. A driver and officer rode on the front seat. A hose basket carried 50 to 300 feet of hose, called red line. A hose line greater than 100 feet would significantly decrease the flow rate of water due to the effect of friction head loss in such a small diameter hose.

Refilling the two tanks was a chore. First a water source had to be found to pour eighty gallons of water into each tank. Then a bag of sodium bicarbonate was dumped into each tank and an agitator was turned to force the soda into solution. The firemen next inserted a quart bottle of sulfuric acid into the tank's fill spout, closed the spout, and turned

the tank upside down, causing the acid to mix with the soda-water solution and create a new charge of carbon dioxide.

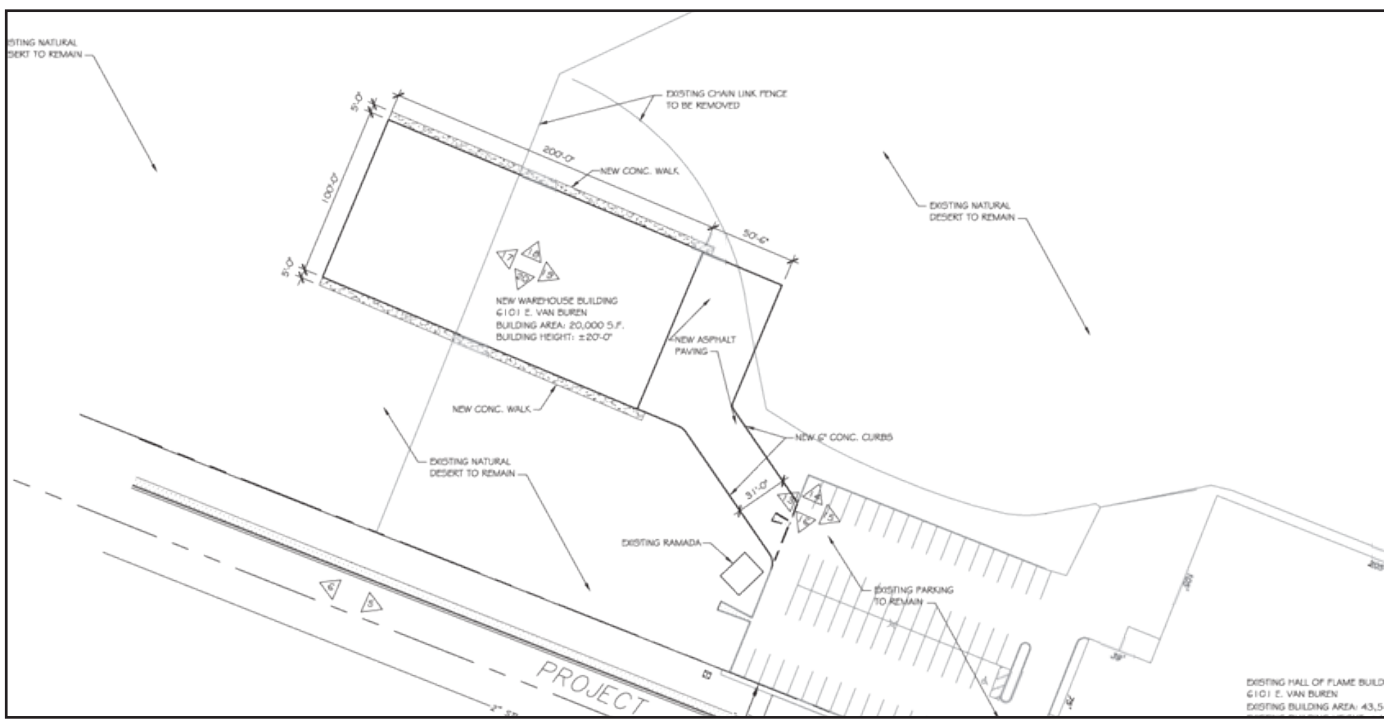
Consequently chemical engines were used as first response rigs that could move quickly to a fire and get water onto it without the need to connect to a hydrant or any other water source. This speed allowed firefighters to extinguish fires before they could spread throughout a structure. They were also quite handy in attacking brush fires. Hundreds of horse drawn chemical engines like this one, and thousands of two wheel chemical engine carts, were used by fire departments and industrial brigades between 1870 and 1910. Soda acid tanks were quite common on motorized fire engines until as late as 1930. Firefighters thought that the carbon dioxide gas helped to extinguish fires, but the gas had little effect beyond its role as a propellant.

Plans Underway for a New Storage Building

For the past few years the growth in the size of the collection has led to a severe shortage of storage space for wheeled objects. Although our existing building has over 45,000 square feet of interior space, only 2,000 square feet are available for storage of wheeled objects. We are thus forced to place wheeled objects on the exhibit floor whether or not we desire to do so. This lack of space has forced us to be overly restrictive in adding to the collection. We are also hesitant to collect pieces in need of extensive restoration because we are reluctant to place such pieces on formal display. Despite a lack of storage we have made a number of additions to the collection after being presented with a one time opportunity to obtain a particularly important piece. We have done so by crowding accessions into the already full exhibit galleries, resulting in displays that are far too concentrated to allow visitors to fully appreciate the quality of the pieces. It has really come down to a process of fitting all of the pieces into the

galleries rather than exhibiting them in creative ways. The Board of Trustees have approved the construction of a new storage building on the opposite side of the museum's parking lot, as depicted in the plan below. The building will allow for 20,000 square feet of storage in a metal commercial style building.

The new building will allow us to move about 25% of the wheeled pieces now on display to storage, allowing us to re-fashion the exhibit galleries to allow visitors to have better access to the displays, with wide aisles and much more convenient wall displays. Exhibits will be rotated so that pieces will regularly move from storage to exhibit. This will also allow us to create temporary exhibits of pieces borrowed from other collections. Of course it will also allow us to aggressively search for additions that will fill gaps in the collection. The new building will also be equipped with shelving for the storage of smaller collection objects.

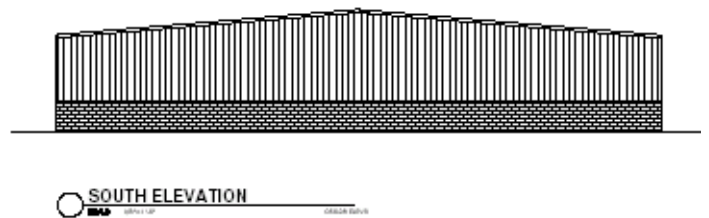
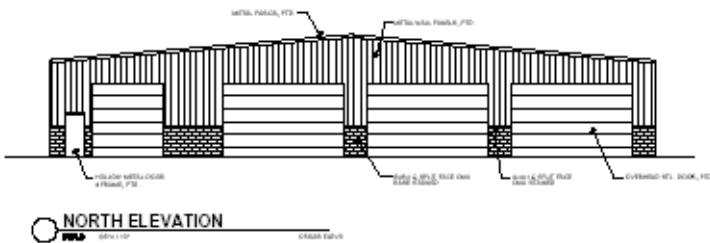
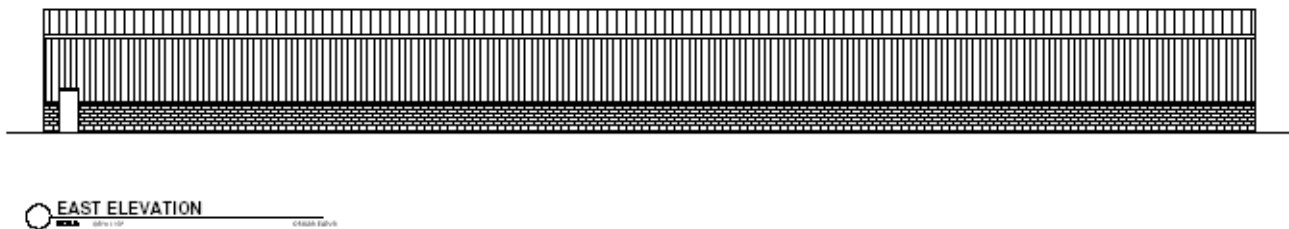
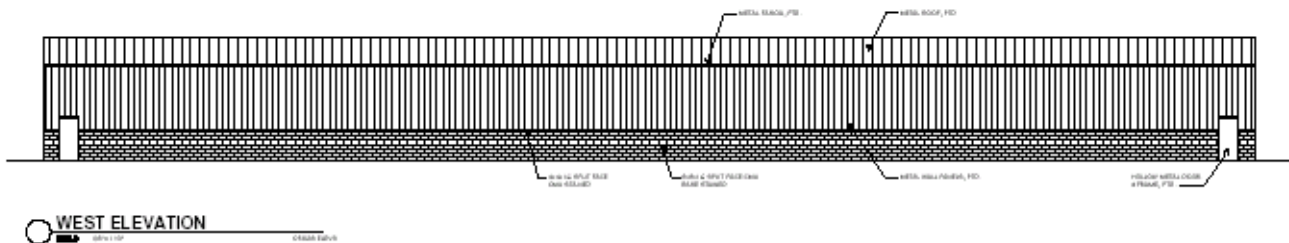


A new storage building will allow us to remove the objects now stored in a 2,000 square foot area adjacent to the wildland firefighting gallery. This room will be turned into a new exhibit gallery that will also serve as an area for after hours dinners, receptions, and other such events, as well as a gallery for temporary exhibits. The museum has a large collection of nineteenth and early twentieth century prints of firefighting scenes, and tens of thousands of historic photographs. We have hundreds of badges, medals, helmets and firemarks which a lack of space makes impossible to exhibit. We have recently acquired excellent collections of scale models of fire apparatus, only a small part of which can now be displayed. An additional exhibit gallery, coupled with expanded wall areas in our existing galleries, will allow

us to display many of these now unavailable items to the public.

As anyone who has built a structure can attest, the process of obtaining all of the necessary permits from local government agencies is rather drawn out. We are in the final stages of obtaining the clearances from the City of Phoenix and the Phoenix Park and Recreation Department that will allow us to get the construction phase underway.

As the elevations below show, the building is a simple “Butler Building” structure with plenty of clear span storage and enough overhead doors to allow easy access.



Don's Next Project - 1900 Chicago FD Wagon

Don Hale's next project involves the restoration of the museum's third hose wagon. It was used by the Chicago Fire Department between 1890 and 1910. There is no maker's name plate. It is possible that the wagon was built in the Chicago FD shops. Founder George Getz Jr. purchased it from the estate of a collector in 1965 and had the rig refurbished. The refurbishment was not up to Hall of Flame standards, and the wagon was placed in storage in 1990. The wheels and chassis are in decent shape but the hose bed needs extensive repairs, and the entire rig needs repainting and striping. Since fire departments were able to sell their hose wagons when they switched from horse to motor power, few have survived. This wagon is well worth Don's efforts.



On May 11 one of our finest volunteers died. Frank Ferek was shot to death by a former employee.

After a stint in the Air Force, Frank entered the automotive repair industry. He was a volunteer fireman for many years in New Jersey, and was Chief of the Willingboro, New Jersey Volunteer Fire Department for several years. In Arizona he owned and operated a transmission repair shop. Frank was one of the volunteers' best apparatus drivers and was a special favorite at outreach events and birthday parties because of his ability to connect with children. Since Frank had three children, eight grandchildren and one great grandchild, this was no surprise. He and his wife Karen were also very active in the museum's Open House Days. He was a fine man and a great friend, and will be sorely missed.

New and Renewed Members Since Winter 2006

Associate Members - \$25

Cory Adams	Thomas Kehoe
Charles Bachini	Dell Lindstrom
Thomas Brace	Harold Lockhart
Jeff Brown	Raymond Millar
John Chase	William Mollitor
George Childs	Robert Murphy
Stewart De Haven	Chris Russett
Andy Fish	Michael Steele
Charles Goddard	Mark Storage
Kate Graf	Mark Wagner
	David White

Black Helmet Brigade - \$60

Edmund Allen III	Ron Marsh
Gene Barker	Neomia Martin
Todd Byers	Melvyn Musson
William Ericson	Col. A. Park Shaw
Jack Frost	Charles Shawl
Hugh Grant	Rev. Norman Trela
Michael Holubec, Jr.	Jeff Trevas
George Hooper	Robin Trimble
Edward Hunt	Charles Troy
Rob Hupp	William Wagner
James Johnson	Samuel Wagnor
John Kohlman	M. Eleanor Zoellner
Charles Lucas	Travis Zuege

Red Helmet Brigade - \$100

Dan Brown	Alexandra Klas
Pat Cantelme	Lydia Kolsch
Michael Dillon	Earnest Milton
Robert Gade	Karen Roddy
Douglas Hammer	Douglas Schermerhorn
Joe Hinkle	Eric & Cassandra Wieser
Thomas Kays	

White Helmet Brigade - \$250

David Scott	Michael Newburger
Peter Molloy	Fred Rice

Benefactor - \$1000

Rhett Butler	Richard Landon
Charles Meany	Michael Byrne

Family Member - \$35

Laurence Appel	Jennifer Germanaud	Bill Ring
John Baker	Wally Golema	Michael Roberts
Marcia Barnabas	Josh Hankinson	Andrew Rucker
Patti Baxter	Thomas Heller	Craig Sanford
Wally Broeder	Steven Heslep	Mary Sarwark
Allen Brozek	Patrick Higuera	Donald Sluyk
Joe Capriotti	Charles Holbert	Donald Smith
Omar Chaudry	Robert Jacobs	Jennifer Smith
Linda Clark	Jill Jahn	John Sobczak
Pascal Covello	Rae Larson	Patricia Stapler
Linda Curtice	Anne Marks	Kathy Terrill
Cannon Dell	Cameron McChesney	Alan Vickers
William Davidson	Debra Miller	Howard Weaver
Don De Rosier	Jim Moir	Floyd Webb
Sue Fischer	Ed Philpott	Jeff Wiatrowsky
Gordon Fowler	David Prost	
Martin Frye	Annie Rea	

Fire Professional Members - \$60

Kelly Addy	Albert Giordano	Jeremy Osife
Murray Aldrich	C. Michael Givan	Thomas Parrish
Norman Arendt	Jay Graff	Edward Pensinger
Jim Baird	Michael Griffis	Pinewood Firefighters
Jack Barba	Roland Hall	Paul Roston
James Barrett	Mike Harris	Kent M. Schod
Robert Baumgarten	Timothy Hellyer	Kevin Shelley
William Beatty	Mike Henning	Ken Smith
John Bliven	Steve Howard	James Staehler
William Brown	Kyle Ienn	Joan Stettbachen
David Cascone	Tim Irwin	Gilbert Strawn
Joshua Charry	Juergen Karheiding	John Swanson
Patrick Daly	Erik Komula	Norm Taylor
David Dearwester	Scott LaGreca	Olav Tryggvason
William Dickey	David Laurie	Carl Weber
Clayton Dillahunty	Conrad Marcione	John Wolf
Ed Dominello	Bill Miles	Alfred Wright
Olaf Drieschner	Brian Moore	Brian Yox
Dave Edwards	George Moore	Jim Perry
Thomas Etter	Earl Moy	Larry Peterson
Carl Fox	Alan Nielsen Sr.	

Life Member - \$3000

Battalion Chief Thad Dahl	Ron Saeger
The Trail of Painted Ponies	

♠ MUSEUM STAFF ♠

Executive Director	Dr. Peter Molloy
Curator of Education	Mark Moorhead
Restorer	Don Hale
Chief Docent	Mike Lyman
Docent	John McLean
Docent	John Bartlett
Librarian	Lesley Marshall
Administrative Asst.	Jennifer Towers
Volunteer Captain	Ron Deutsch

♠ OFFICERS AND DIRECTORS ♠

President	George F. Getz
Vice President	Bert A. Getz
Vice President	Lynn Getz - Schmidt
Treasurer / Secy.	Michael J. Olsen
Director	Bert A. Getz, Jr.
Director	James L. Johnson
Director	Bernard C. Lowe, Jr.

The Hall of Flame Museum of Firefighting is operated by the National Historical Fire Foundation, a 501(c)(3) non-profit institution.

The museum is in the Phoenix Papago Park, across Van Buren Street from the Phoenix Zoo.

The museum is open to the public from Monday through Saturday from 9 to 5, and on Sundays from Noon to 4.

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Website: www.hallofflame.org

Contributions to the National Historical Fire Foundation are tax deductible to the extent allowed by law.

♠ HALL OF FLAME VOLUNTEERS ♠

Joe Bakas	Ralph Glasmann	Fred Mills	Richard Stuve
Dan Baker	Joe Hinkle	Pete Mortensen	Larry Taggart
George Batsche	Mark Kauffman	James Nealand	Ann Marie Zrust
Gary Bohling	Frank Kriz	Sherry Nealand	Mike Zrust
Ron Deutsch	Eric Landau	Rick Pike	
Kerri Deutsch	Richard Landon	Edward Rostrom	



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