



# The Fox Leads the Way at Fort Leonard Wood

*By Ms. Christy Lindberg*

In 2005, the Engineer, Military Police, and Chemical Corps emplaced vehicles emblematic of their missions and histories in a prominent display near Sverdrup Gate (commonly referred to as the “main gate”) at the U.S. Army Maneuver Support Center, Fort Leonard Wood, Missouri.

The vehicle chosen to represent the Chemical Corps was the M4A1 POA-CWS-H5 Sherman Flame Tank. This tank, which was modified with a flamethrower that augmented the 75-millimeter main gun, was introduced at the closing stages of World War II to clear enemy caves and pillbox machine gun emplacements in the Pacific Theater. Although the tanks were developed and manufactured by the Chemical Warfare Service, they were not fielded before the Japanese surrender and the conclusion of the war. The vehicles did, however, see service five years later in Korea, where they were operated by U.S. Marine Corps armor detachments. Although the M4A1 is an important historical artifact, the thousands of Soldiers and civilians passing through the main gate daily did not readily recognize it as a symbol of the Chemical Corps; the flame tank was not considered representative of the Corps’ 21st-century mission.

The M93A1 Fox Nuclear, Biological, and Chemical (NBC) Reconnaissance System was a more appropriate selection. Tough and reliable, yet with full terrain mobility, the Fox uses integrated sampling systems to detect, mark, and report contaminated areas of the battlefield. The role of the Fox and its crew is integral to the Chemical Corps mission to “protect the force.” The functionality of the Fox also proved to be the biggest obstacle in selecting it for display. Nearly all Fox NBC Reconnaissance Systems in the Chemical Corps fleet are still in service and too valuable to current operations to be retired simply for a museum exhibit.

However, a vehicle with an impressive record of service in training, in the field, and in combat became available—an M93A1 Fox with the bumper identifier “D-31,” from Aberdeen Proving Ground, Maryland. This “traveling laboratory” has fulfilled its original mission and has also been adapted for other uses. Built for the German army in March 1983, D-31 was first assigned to a Bundeswehr chemical unit. In 1990, the vehicle was recalled to its place of manufacture, Thyssen Henschel in Kassel, Germany; reconfigured; and modified with U.S. components and English-language decals. D-31 was one of sixty vehicles that the German government donated to the U.S. Army as a contribution to Operation Desert Storm. At first, D-31 was placed in floating stock (where vital equipment and supplies are packed aboard cargo ships for immediate maritime shipment) with the 490th Chemical Battalion in Kuwait. At the end of hostilities, the 490th signed D-31 over to the 165th Heavy Supply Company. In time, it was sent to Fort McClellan, Alabama, where it remained in pre-positioned stock until its first use—as a training vehicle for Dragon Soldiers at the U.S. Army Chemical School (USACMLS). In 1999, after being upgraded with new reconnaissance equipment and other modifications, D-31 moved with the rest of the USACMLS equipment and personnel to its new home at Fort Leonard Wood, Missouri.

Shortly after, D-31 was moved to Fort Lewis, Washington, where it was fielded for the first time. It was attached as an NBC reconnaissance vehicle for the newly formed Stryker brigade combat team. It was in this capacity that D-31 was deployed overseas in support of Operation Iraqi Freedom in November 2003.

D-31 was attached to 3d Platoon, D Troop, 1-14th Squadron (Stryker Cavalry), 3d Brigade (Stryker Brigade Combat Team), 2d Infantry Division. Without the true “Chemical” mission for which it was built and for which the crew had trained, D-31 performed



**The M93A1 Fox D-31 prior to restoration**

other duties, including convoy escort missions. During the early morning hours of 29 May 2004, D-31 was struck while serving as the lead vehicle in a three-vehicle convoy traveling from the forward operating base at Tal Afar to Mosul. The damage was so severe that the removal of D-31 from the area was prohibitive. There were four Soldiers in the vehicle—three received moderate injuries, and one was seriously wounded. The solid construction of the vehicle and the quick reaction of the driver helped prevent further devastation. The crews of other convoy vehicles provided immediate security and skilled combat lifesaving support. These efforts ensured the rapid evacuation of the D-31 crew to nearby medical facilities. All four Soldiers recovered from their wounds and returned to active duty.

Later, an M88A2 Hercules recovery vehicle and an M1070 Heavy Equipment and Truck and Transport (also known as a “lowboy trailer”) were dispatched to the site to recover D-31 and return it to the forward operating base.

The battle-damaged D-31 was returned to the United States. It remained out of service at Anniston Army Depot, Alabama, until a new use was found.

Battle-worn and training-tested, D-31 was resurrected and shipped to Aberdeen Proving Ground in 2006. For the next year, it was used in yet another capacity for which it was not originally intended. The D-31 served as a platform for ballistic testing that provided insight into new methods for protecting Fox crews and preventing battlefield casualties.

Following its role in ballistic testing, several key individuals at the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) (formerly USACMLS) arranged for D-31 to be returned to Fort Leonard Wood. After much planning and hard work, including the concerted efforts of the 58th Transportation Battalion Motor Pool and the Directorate

of Logistics, Fort Leonard Wood, D-31 was transformed from a battle-damaged, bullet-scarred, stripped-down, rusty, test range hulk to—in the words of a former USACBRNS commandant, Brigadier General Thomas Spoehr—the “best-looking Fox I have ever seen in my life.”

On 12 June 2008, D-31 was officially dedicated in its final role—as the symbol representing the Chemical Corps at the main gate of Fort Leonard Wood. Speaking on the service history of D-31, Brigadier General Spoehr said, “She is a trained Soldier. She was a part of the German army, survived multiple . . . attacks and small-arms fire, and protected her crew members. Although it is only a piece of metal, it really represents the fabric of our Corps, and I am so grateful to have it here.”

D-31 reflects the proud lineage of its service, but it also represents all M93A1 Fox NBC reconnaissance vehicles and those men and women who have served and continue to serve on Fox crews. It stands as a highly visible and dramatic tribute to the service of past and future Dragon Soldiers. 

#### References:

“3-2 SBCT,” Incident Report, 3d Platoon (NBC Reconnaissance), D Troop (Reconnaissance Surveillance Target Acquisition), 1-14th Squadron (Stryker Cavalry), 3d Brigade (Stryker Brigade Combat Team [SBCT]), 2d Infantry Division, Fort Lewis, Washington, 29 May 2004.

Allison Choike, “Chem School Dedicates Fox Recon Vehicle,” *Guidon*, 19 June 2008.

“Fox M93A1 Nuclear, Biological, and Chemical Reconnaissance System (NBCRS),” Military Analysis Network, <<http://www.fas.org/man/dod-101/sys/land/m93a1.htm>>, accessed on 9 September 2008.

“The Fox NBC Reconnaissance Vehicle,” Information Paper, Gulf War Illnesses, Medical Readiness, and Military Deployments, Department of Defense, updated 14 March 2001, <[http://www.gulfink.osd.mil/fox\\_vehicle\\_ii/](http://www.gulfink.osd.mil/fox_vehicle_ii/)>, accessed on 9 September 2008.

Major Joseph J. Hauer, “Something Old, Something New, Something Borrowed, Something Blue . . . and Gold: The Chemical Corps’ Conversion From NBC to CBRN,” *Army Chemical Review*, July–December 2007.

Darrell Todd Maurina, “FLW Fox Vehicle Put on Display,” *Waynesville Daily Guide*, 16 June 2008.

Darrell Todd Maurina, “Welders Make Battle-Scarred Fox Vehicle Look Almost New,” *Waynesville Daily Guide*, 19 June 2008.

“Updated Paper Provides Insights Into Fox Vehicle Capabilities, Limits,” GulfLINK, 27 March 2001, <[http://www.gulfink.osd.mil/news/na\\_fox\\_info\\_27mar01.html](http://www.gulfink.osd.mil/news/na_fox_info_27mar01.html)>, accessed on 9 September 2008.

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