

# **The U.S. Army Class 1500 Fire Truck and Sabre Fire Fighting Trailer**

**By Ted Heinbuch**

Beginning in 1954 the Army Corps of Engineers had begun development of the Class 1500 Crash Truck to meet the challenges associated with new type of weapons, missile installations and the increased use of aircraft at Army Airfields, but it wasn't until 1959 that the truck went into production. Manufactured by the Walter Motor Truck Company it was constructed with an all aluminum frame which was integral with giving a very rigid construction. The 4x4 vehicle was powered by a rear mounted, LeRoi, 8-cylinder, 300 hp gasoline engine driving all 4 wheels through a torque converter and 3 speed transmission and could travel at low speed while pumping at full capacity through a special pump transmission. Fully loaded the truck had a top speed of 60 mph and could accelerate from 0 to 50 mph in 60 seconds. It measured 28 ft in length, was 8 ft wide and 12 ft at the highest point on the turret.

The completely enclosed, heated cab could hold 6 fire fighters and protection of all equipment was provided in enclosed and heated compartments. Two 150 foot, 1 inch booster lines were mounted on hose reels in compartments on each side of the body. The truck was equipped with a two stage 1,500 gpm centrifugal pump, mounted midship on the chassis with the pump panel located on the right side of the vehicle and carried 950 gallons of water and 200 gallons of foam. A remote controlled turret nozzle designed by the Engineer Research and Development Laboratories was located on the roof of the truck cab and a 20,000 pound winch with 300 feet of 5/8 inch cable was mounted on the forward vehicle frame with operation controls located in the cab.

A 20 foot extension and 16 foot A frame ladder along with four, 5 in hard tubes were carried above the engine compartment between the two hose beds. The hose beds held 1,000 feet of 2 ½ and 150 feet of 1 ½ inch hose. Army records indicate that 136, Class 1500 crash trucks were produced.

The Sabre Fire Fighting Trailer was designed to be towed behind the Class 1500 Crash Truck to increase the truck's water capacity and was manufactured by Sabre Metal Products, Inc. The water, electrical and airbrakes systems were connected to, and operated from the crash truck. The aluminum water tank held 2000 gallons of water and was divided into three compartments by two bulkheads, which served as baffles to prevent sudden shifting of the water load. The 1500 gpm water pump was driven by a 24 volt, 12 hp electric motor. The trailer pump was automatic. A float switch installed in the truck water tank energizes the trailer pump when the water in the truck tank drops to  $\frac{3}{4}$  full and opens the electrically operated discharge valve. Water is pumped through the two 5 inch suction hoses into the fire pump suction connections at the rear of the crash truck. When the trailer tank is empty its float switch de-energizes the electric pump and the fire truck draws the balance of the water from the truck tank. If the rate of discharge from the fire pump is less than 1500 gpm, surplus water from the trailer flows in the truck water tank. When the fire truck tank is  $\frac{3}{4}$  full the float switch will shut off the electric trailer pump. There is no interruption in pumping when changing from one tank to the other, thus providing for an uninterrupted 3000 gallon discharge at the desired flow.

For operations in cold climates the trailer was equipped with a gasoline fired heating unit which circulated warm air throughout the interior of the trailer and warm water through piping located in the bottom of the water tank. A hand operated hydraulic pump lower the trailer jack and the trailer was equipped with air brakes supplied from the truck air system via air connections located on the rear of the crash truck. Both the crash truck and trailer were equipped with 16.00 x 25 floatation type military tires. Army records indicate that 8 of the fire fighting trailers were produced.