

RFI411.org — Subject: **CAFS, Pumper/Tanker**

Nicholson (PA) VFD's "War Wagon"
1500-gpm/2000-gal CAFS Pumper/Tanker



This CAFS pumper/tanker was built by Advantage Fire Apparatus on a totally rebuilt former FDNY Seagrave aerial chassis. The cost was \$240,000 — about 2/3 the cost if a new chassis was used.

All discharges (with the exception of the LDH discharge) are piped with 2-1/2" piping and can discharge CAFS, Class A foam solution, or plain water. The air compressor is a 200-cfm unit. Two preconnects and a pre-piped deck gun are located above the pump panel.

The two lengths of 6" suction are 15-ft long.



A squirrel-tail suction is provided on the right side to simplify porta-tank operations when needed.

For static source drafting operations, the pumper can be nosed into the water source and 1 or both of the 15-ft suction hoses added to the squirrel tail.

A 5" discharge is also located on the right panel.



The rear of the apparatus has been striped with reflective tape for maximum safety.

The hose bed carries 1-3/4" and 2-1/2" preconnects and 1500 feet of 5" supply line.

Ladders and pike poles are carried in the center compartment (1) while a 500-gpm TFT Blitzfire is carried in the lower compartment (2).

It's All in The Details — Pump Controls



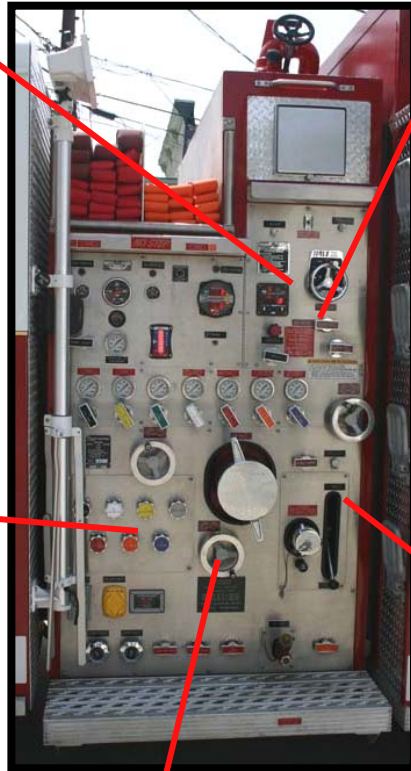
A vernier throttle and Hale pressure relief valve were installed in addition to the electronic engine controller.



The “Primer Selector” control allows the operator to prime the pump (MAIN PUMP PRIMER) and work out of the 2000-gal tank. Once a suction line is connected from the porta-tank to the 6” suction, the operator switches the Prime Selector to the Suction Pre Primer position to prime the suction line up to the Master Intake Valve — eliminating the potential of losing prime during the operation.



The control valve for the 3” tank-to-pump line.



The 6” intakes are equipped with manually-operated Hale Master Intake Valves (MIVs) to minimize intake friction loss, and with pre-primers to allow suction hose to be primed after the pump has been primed.



Two tank-to-pump lines are provided. This valve controls the 5” tank-to-pump line.

It's All in The Details — Water Shuttle Ops



Although the primary function of this apparatus is fire attack using CAFS, it was also designed to perform water shuttle operations.

A 10" Newton electrically-operated dump valve with extension chute is installed on each side at the rear of the apparatus.

These valves and chutes are controlled by the driver from inside the cab. So the driver can see what's going on when dumping, a black and white TV camera, connected to a receiver in the cab, is installed over each dump, along with a light for night operations.

A large diameter direct tank fill line equipped with a control valve and check valve is installed at the rear to allow the tank to fill at 1000 gpm.

Direct Tank Fill Line



Light

TV Camera

10" Dump Valve with Extension

In Cab Dump Controls & TV Receiver



TV Receiver

Extension Chute Controls

Dump Valve Controls

Tank Water Level Gauge

View of Left Dump Valve as Seen by Driver in Cab

