

Henry Heck

From: Sharon Davis <sharon.davis@vnahtsr.org> on behalf of Sharon Davis
Sent: Monday, September 19, 2022 8:46 AM
To: 'Henry Heck'
Subject: FW: Public Safety Minutes

From: sdavis1120@comcast.net <sdavis1120@comcast.net>
Sent: Sunday, September 18, 2022 3:37 PM
To: Sharon Davis <sharon.davis@vnahtsr.org>
Subject: Public Safety Minutes

Public Safety committee met: 9/14/2022
members present: Alderman DePoy, Chair Davis and President Doenges. Anna Tadio attempted to attend via phone.
Also present were Chief Lovett, Mayor Allaire, TJ Lacz, Aldrrmen Ettori, Savage, Talbott, Barbagallo and Attorney Bloomer.

The committee met to discuss the repairs needed for Ladder 1. It is a 2001 75 foot aerial truck that was damaged years ago by a double fire in 2005 and in 2007 by high voltage wires. All repairs were done but many issues remain.

In J
July of 2022 the ladder truck failed several test and for fireman safety was taken off line.

Several option to repair the ladder were explored.
After much discussion the motion is as follows.

To Choose option 3 for 819,644.00 and to apply 200,000.00 from the equipment replacement fund .
To enter in to contact with LTC for a 10 years coverage for Ladder 1. This option will also alow the fire equipment fund to stay on schedule .Motion passed 3-0.
And I so move

.. PRIVACY & CONFIDENTIALITY NOTICE: This message may contain confidential and/or privileged material and is transmitted for the intended recipient exclusively. Any use, re-transmission, copying, reproduction, circulation, publication, dissemination or distribution by any person or entity other than the intended recipient is strictly prohibited. If you received this message in error, please tell us by return email and destroy this communication, including any attachments. Because e-mail can be altered electronically, the integrity of this communication cannot be guaranteed.



Ladder #1 is a 2001 American LaFrance, 75' foot, aerial ladder, manufactured in Ephrata, PA by Ladder Tower Inc (LTI), at a cost of \$530,938.

May 2005 the truck was damaged by radiant heat, at an arson fire on Pine Street, involving two buildings on fire. It was driven to the manufacturer, for repairs. The truck had its burnt components replace or repaired, the ladder was inspected, tested, recertified and the truck was placed back into service, by the manufacturer.

July 2007 the truck was energized by high voltage wires, in front of the station. Damage was done to multiple components, particularly the stator ring. A stator ring resembles a LP record, where each "song" is a ring of copper, electrically isolated from the next "song". Wipers on the bottom of the ladder base, the turntable, slide along these "songs", conducting electrical signals to run its functions and its lighting, as it rotates around. The disk literally had a hole burned through it.

A repair was done, which never really solved the problem completely. This repair would become one of the elements, leading to where we are today.

In April 2020, during inspection it was determined that the heel pins would need to be replaces in a few years, probably by 2024. The heel pins are the pins at the base of the ladder, where it pivots, when it is raised. They are normally replaced approximately half way through the service life of a truck (12.5 years). The costs, at that time, were estimated at \$9473.

On July 6, 2022, Ladder #1 failed its loaded drift test, and a rotational test related to issue with the stator rings contacts being damaged. The loaded drift test consists of raising the ladder and hanging weight on its tip to simulate the weight of a rescuer and victim, along with the weight of water, as it is sprayed from the ladder's nozzle. The ladder could not maintain its position. The rotational test failure was due to the inconsistent electrical conduction through the stator ring due to the hole (2007 incident). The resulting hesitation in the rotation created unwanted lateral loads on the ladder and the turntable. The truck was taken out of aerial service, as a result of these findings. Its pump is, however operational and it can be used as needed as a pumper.

On July 14, 2022, a technician from Ladder Tower Corp (LTC), the successor to LTI, assessed the truck with the intentions of:

1) estimate the required repairs cost to the vehicle to gain the 1 year certificate on the aerial, with the hopes of stretching the service life for a couple of more years.

2) estimate the required cost to perform an "Index D" repair, with the intension of getting 10 more years of service life. Due to the current condition, that date would be 2032.

3) estimate the cost of a complete rebuild, with new chassis, and recertification of the vehicle, with the service life of 2047.

1) Minimal repairs to Ladder #1, where we get it fixed to gain a certificate

Repair stator ring that was burned by contact with high tension transmission lines

Repair Cylinders and hold valve

Repair Safety Railing where hole was drilled for flag

Pass the NFPA Required Ladder Test for this Calendar Year, no guarantee beyond this point, and it would be unlikely it would make it to its original end of service life of 2026

\$28,000

2) Annex D Refurbishment

Above,

Repair/replace torque box

Rebore heel pins

New Emergency Lights

NFPA Markings

All required NFPA Upgrades, to bring it back up to 2001 standards, not current NFPA

requirements

Estimated 2 months turnaround

Manufactures Guarantee on all new parts, No warrantee on remaining parts

10 years of additional Service life, this truck would need to be replaced in 2032.

\$500,000

3) Complete Rebuild using Existing Vehicle Body and Ladder, placed on a new chassis

Immediate replace lift cylinders and stator ring at Ephrata, PA, returning the truck to service within the next month, and then when parts are ready, return to Ephrata, PA, for completion of the rebuild, which would take 4 months.

Refurbish the existing ladder from vehicle; bead blast, visually inspect for defect, stress test, magnetic particle testing and ultra sound testing, recertify as new and repaint

Replace all wiring to meet new NFPA Requirements

Replace all hydraulics to meet new NFPA Requirements

Replace the top of the pump, tear down and factory rebuild the pump to "As New Condition"

Refurb all hard surfaces to meet new paint, marking and surface texture requirements

Install all tested and recertified components on a new truck chassis

Repaint the entire truck

All parts covered by Manufacturer's Warrantee or all work covered by LTC as stated

New VIN and Title- Truck Certified for 25 Year Life Expectancy (2048), with all documentation

\$819,644

If we were to decide not to follow this rebuild option, a new truck, similarly outfitted would take over 400 working days (2 years+) to build, with no guarantee on the delivery date. The cost would be determined upon the start of the building of the truck:

Today's cost of a Totally New Ladder Truck \$1,200,000

As LTI, and successor LTC, were the original manufacture, they are poised to do the most efficient rebuild of this apparatus. Manufactures rebuild their own products with components of similar design. Any other manufacture would either have to buy components from LTC, or adapt their products to LTC product. This would be undesirable, and extend the repair time.

Miami Dade Fire has been faced a similar problem. They currently have had 5 of their ladder trucks rebuilt, and are happy with the results.

Syracuse Fire Department has just completed having 6 of their ladder trucks rebuilt. Two more are schedule after our "slotted time". I have not heard back from them, yet.

I have discussed the options, as I've presented them to you, with the officers of this department. They, along with the Union's lead, of our past truck committee, have reviewed the specification package. After carefully considering all of the options, we are in agreement that the best option is the third. From the initial purchase of this vehicle, the opportunity to rebuild it was there, and it makes perfect sense to take this opportunity to get essentially a new, guaranteed and warrantied vehicle, for approx. 2/3 the cost of a new vehicle and so quickly. This truck will last us another 25 years. Without it, we are vulnerable and the need for it is great. The rebuild options will save countless months of production, delays and cost increases.

I have discussed the financial implications of this purchase with Treasurer Markowski as it relates to the Fire Equipment Fund. We discussed the options of no money down, \$200,000 down and \$300,000 down on the purchase. Although either option for putting money down on the truck is sustainable, we feel that the \$200,000 down on the purchase would put us in a better situation, in case something else would need to be addressed by the Fire Equipment Fund. The 10 years of payments option also positions us better for the future, with the Tower being paid out over the next 13 years, and Engine #3 being paid out over the next six years.

My recommendation is to rebuild this apparatus, using the existing ladder and rear section of the truck. Our history with this manufacture goes back to 2001, when the truck was first built. They have helped us on numerous occasions, with maintenance and upkeep, and have fostered a history of trust. I believe this option affords us a major gain in sustaining the Fire Equipment Fund at a level that will best protect us for an unforeseen future. I ask the Public Safety Committee to recommend to the full Board on September 20, 2022 that we enter into a contract with LTC, in an amount not to exceed \$819,644.







2001 American LaFrance/LTI 75' straight ladder repair options 2022.09.13

APPARATUS	MANUFACTURE DATE	PURCHASED VALUE	TOTAL PURCHASE PRICE	REPLACEMENT YEAR	TODAY'S REPLACEMENT COSTS	ESTIMATED COST
Ladder 1	2001	\$535,710.00	\$535,710.00	2026	\$1,200,000.00	\$1,500,000.00
Engine 3	2022	\$404,754.00	\$444,917.62	2045	\$510,000.00	?
Engine 2	2014	\$606,258.00	\$606,258.00	2039	\$1,000,000.00	?
Engine 4	2018	\$519,737.00	\$519,737.00	2043	\$550,000.00	?
Tower 1	2020	\$1,486,000.00	\$2,070,387.00	2045	\$1,800,000.00	?
Pick Up 6	2017	\$49,000	\$24,000.00	2024	\$30,000.00	\$60,000.00 msrp
Pick Up 5	2019	\$52,000	\$27,500.00	2026	\$35,000.00	\$70,000.00 msrp

Fire Equipment Fund	
7/1/2022	\$984,281.91
Mendon	\$60,000.00
General Electric	\$17,000.00
Tuttle Law Print	\$2,250.00
Isovolta	\$6,750.00
CONTRACT TOTAL	\$86,000.00
Tax Payers	\$175,000.00
Alarm System Maint Fee	\$20,000.00
ANNUAL Deposit into FEF	\$281,000.00

Yearly Obligations from the Fire Equipment Fund				
	Due Date	Yearly Payment	Payments Left	Total Cost over term
Tower	6/7/2021	\$138,025.80	13 years	\$2,070,387.00
Eng 3	4/8/2022	\$63,559.66	6 years	\$444,917.62
Ladder 1	\$200,000 Down	\$76,739.16	10 years	\$967,391.60

Total of Payments \$278,324.62

Currently Budgeted "Big Ticket Items"		
Portable Radios	approx 10 years	\$40,000.00
Turnout Gear	5 year life	\$98,000.00
Airbottles	15 year life	\$30,000.00

Items we've applied for a Federal Grant		AFG Grant Received
Airpacks		\$238,000
Thermal Imagers		\$35,000
		\$40,952.38