

# Minutes

Time            Wednesday, June 30, 2021

## Present:

Mike Johns/~~Bill Keegan Out~~  
Chris Gallagher  
Amy Berdos  
Edward Oleary  
Larry Ooi

George Samia - Phone

Chief Mike Kelleher  
Eoin Bohnert

Stephanie McGowan

## Presentations:

- A Presentation Mike Kelleher - As a result of a two year delay on the delivery of ambulances authorised at the ATM, the fire department was faced with the possibility of critical equipment failure with no backup equipment breach the gapp. The fire Chief presented the option of buying a readily available used ambulance which could be utilized as backup for the interam waiting period for the new ambulances. Upon delivery of the new equipment, the used ambulance could be used for mutual aid etc. During the presentation the chief provided backup in the form of photographs and quotations witch are attached to the minutes.
- B The committee and other participants asked questions regarding expense, time frames and potential use.
- C The CIP committee voted unanimously for the Chief to move ahead with the purches of the additional used ambulance. Motion was made by Chris Gallagher seconded by Amy Berdos.



# FFD Rescue 29 Condition Report

12/10/2020

FF/Paramedic Eoin Bohnert, Maintenance Coordinator  
Master EVT/ASE technician

## Summary

As part of Foxborough Fire and Rescue Motor Squad's predictive, NFPA compliant Maintenance and Repair Program, all ambulances undergo an annual inspection utilizing the NFPA 1917 and 1911 standard's ambulance inspection criteria. These criteria cover every aspect of the ambulance from front to back and top to bottom, including electrical system and patient compartment. The goal of these yearly inspections is to establish and maintain guided benchmarks that aid in predictive maintenance and replacement practices.

I performed the annual inspection on rescue 29 on December 10<sup>th</sup>, 2020. I have summarized the results of that inspection and my conclusions below, and have attached pictures of various defects to this document.

## Findings

Rescue 29 is a 2012 Horton Emergency Vehicles custom ambulance built on an International Durastar 4400 chassis. It was purchased for \$255,440, and is currently in service as a third-due ambulance.

Rescue 29's overall condition can be categorized as fair, with average issues and deficiencies for a 9-year-old ambulance in the specific operating circumstances typical for Foxborough Fire and Rescue. New England weather, the "start and go" nature of emergency response, as well as the significant transport distance to our nearest hospitals all combine to place an abnormally large amount of stress on any ambulance in our fleet. Rescue 29 has over 133,000 miles, even though it has spent the last two years in our slowest running position as third-due ambulance. This means that Rescue 29 is only utilized if there are two other medicals already in progress and a third comes in, or if one of the other two ambulances is out of service.

Rescue 29 is beginning to enter an age/use range in which ambulances are historically plagued with increased repairs of an unscheduled nature, such as bad injectors and high-pressure fuel pumps, as well as an onslaught of expensive preventive maintenance repairs (ex. Front and rear brakes, valve lash adjustments, tires, DPF system removal and cleaning, etc.)

I have listed below some of the current issues found on inspection:

1. The high beam light circuit has recently become inoperative without emergency lights on, needs to be diagnosed.
2. The driver's side headlight assembly is taking on water and needs to be replaced. (fig 1)
3. The rear ICC (upper marker) light circuit is inoperative, needs to be diagnosed.
4. There is significant corrosion on the engine charge air cooler tubes that will need to be replaced. (fig 2)
5. The vehicle has multiple oil leaks and also appears to be consuming oil outside of normal limits, indicating possible internal engine issue which will need to be further investigated. (fig 3)
6. Failed cooling system pressure test with no visible leaks, indicating some kind of internal coolant leak that needs to be diagnosed.
7. The rear patient compartment loading door latches are working but seize on secondary locking assembly. The rear doors need to be disassembled and latch/rod mechanisms replaced.
8. The vehicle needs front pads, rotors and calipers replaced. (fig. 4)
9. The drag link arm and tie rod ends have excessive play and need to be replaced. (fig. 5)
10. The rear air suspension bags have significant dry rot including two pin hole leaks and need to be replaced. (fig. 6)
11. The air suspension quick recovery or "ping" tanks both have significant amounts of rot and need to be replaced. (fig. 7)
12. All vehicle batteries failed load test and need to be replaced.
13. Multiple instances of torn upholstery need to be replaced to prevent pathogen and fluid contamination.

Based on my above findings, and the indication of internal defects growing within the engine in particular, it is my opinion that at this time the most prudent decision for the Department, and most importantly the Town, is to keep with planned replacement practices and begin the process of replacing Rescue 29.

Respectfully Submitted,

FF/Paramedic/ EVT Eoin Bohnert

Figure 1- water soaked headlight assembly



Figure 2- rotting air cooler line



Figure 3-oil leaks and rotting cooler line

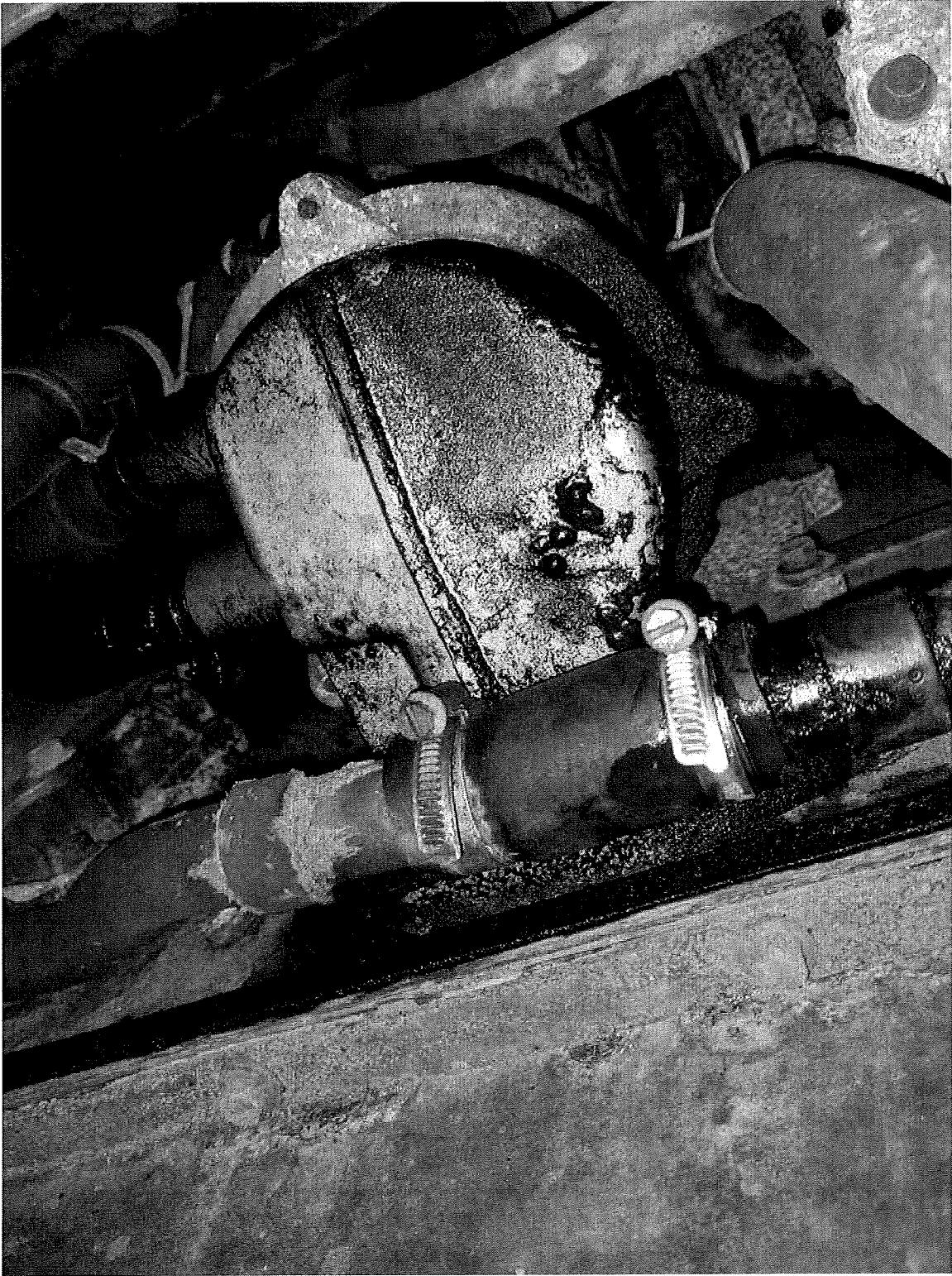


Figure 4- front rotors in need of replacement





Figure 5- Drag link ends



Figure 6- rear air bags dry rotted and leaking

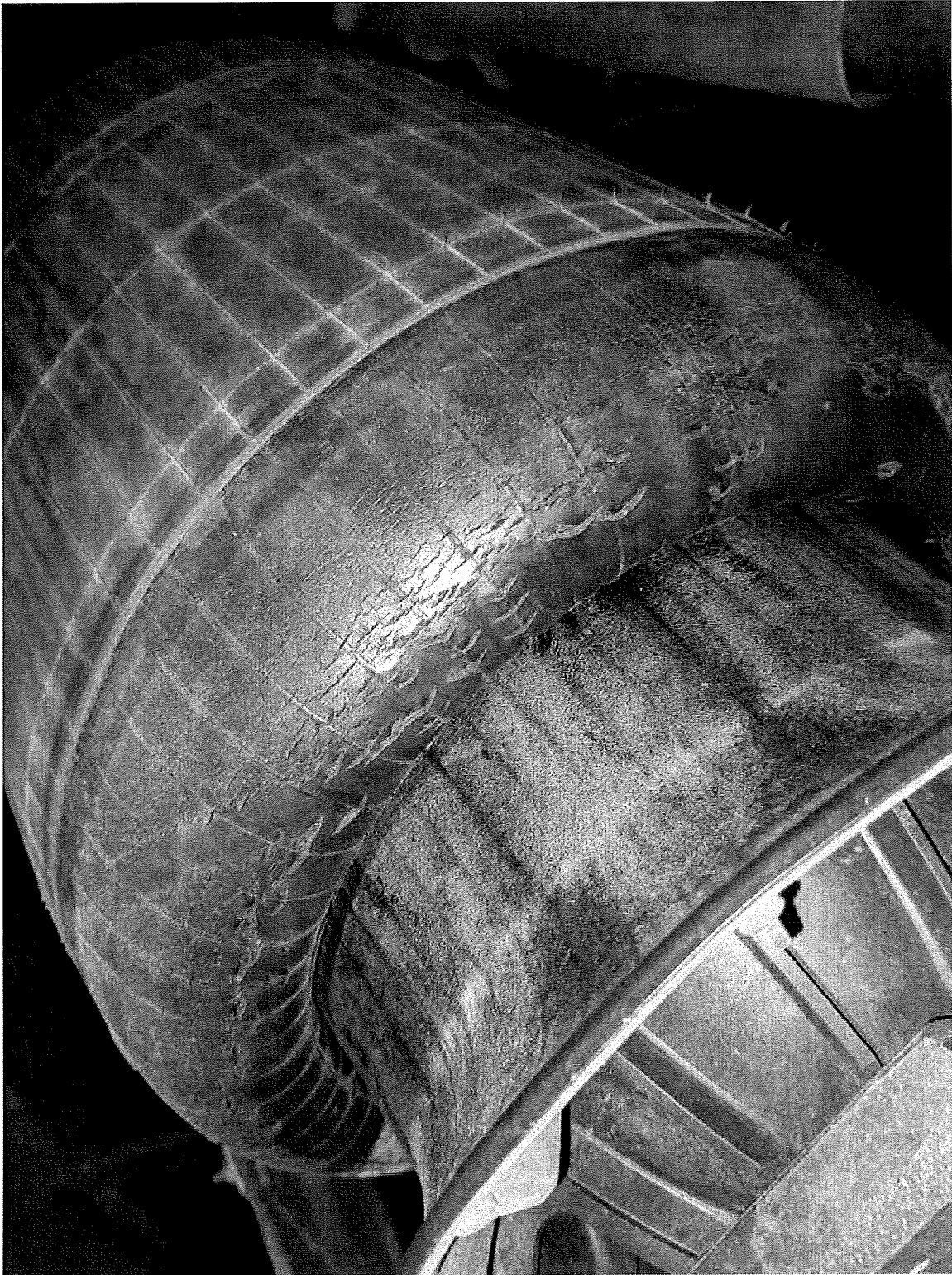


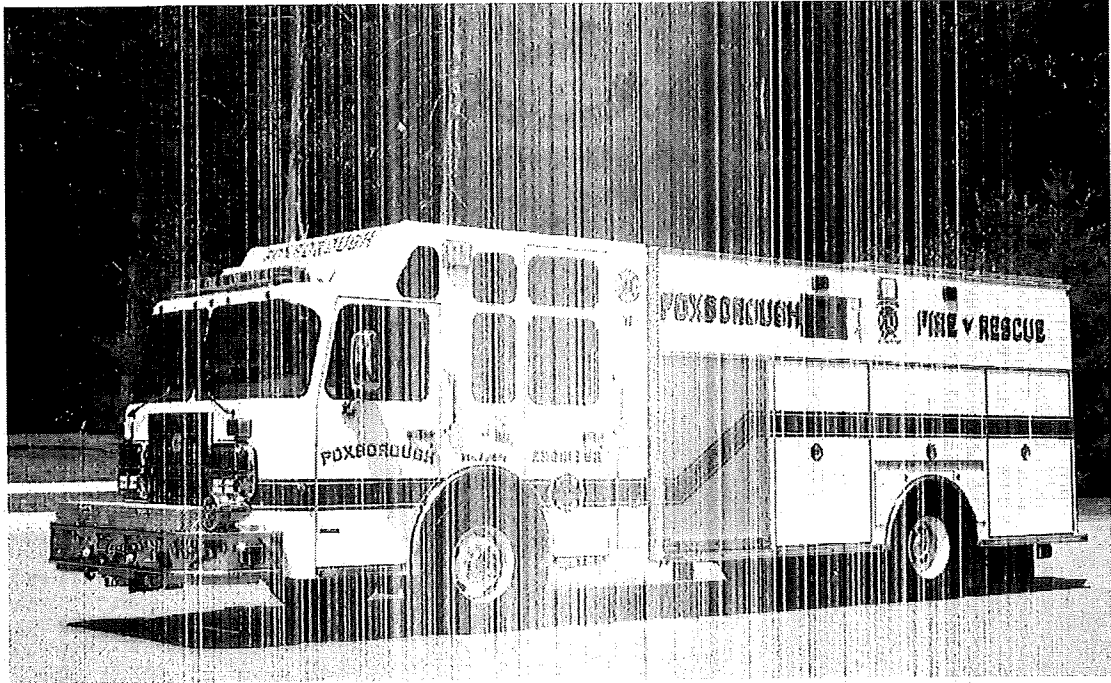
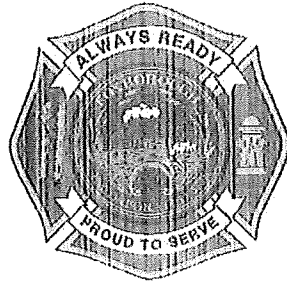
Figure 7- rotting quick recovery tanks



Figure 8- one of many instances of torn upholstery in cab and patient compartment areas







# FFD Engine 22 Condition Report

12/3/2020

FF/Paramedic Eoin Bohnert, Maintenance Coordinator  
Master EVT/ASE technician

## Summary

As part of Foxborough Fire and Rescue Motor Squad's predictive, NFPA compliant Maintenance and Repair Program, all apparatus undergo an annual inspection utilizing the NFPA 1911 standard's apparatus inspection criteria. These criteria cover every aspect of the apparatus from front to back, top to bottom, electrical system to water pump. The goal of these yearly inspections is to establish and maintain guided benchmarks that aid in predictive maintenance and replacement practices.

I performed the annual "1911 inspection" as it is commonly referred to, on Engine 22 on December 2<sup>nd</sup>, 2020. I have summarized the results of that inspection and my conclusions below, and have attached the inspection as well as pictures of various defects to this document.

## Findings

Engine 22 is a 2005 Smeal/Spartan custom rescue pumper with a 1500GPM pump. Its age puts it in the twilight of its expected life cycle according to Foxborough Fire and Rescue's established replacement practices. Engine 22's age makes it a "pre-emission" apparatus, meaning that it lacks any and all of the groundbreaking environmental emissions advancements that have been made in the last fifteen years; to include Diesel Particulate Filters (DPF) and Diesel Exhaust Fluid Injection (DEF). In general, Engine 22's current physical condition is largely on par with a typical 15 year-old fire apparatus in the north east, except for the major conditions noted in the following summary and attached inspection.

The largest concern with engine 22 is the frame, there are multiple instances of delamination of the frame rails at multiple points on the apparatus, this would have already necessitated frame rail replacement, except for that Engine 22 was ordered with a double- frame rail. This has allowed engine 22 to stay in service longer than would have been possible otherwise. At this time, corrosion in certain spots is become advanced enough it is pushing the frame rail sections apart from each other.(figure 1) There are also two cross-members whose structural integrity is degrading at a rate that will necessitate replacement.

The cost to replace frame rails in the near future alone, and on an apparatus of this vintage, necessitates the replacement of engine 22. In my experience, frame rail replacement quotes will average at least 60,000 dollars, or more.