London Fire Brigade Contract Overview

Park Academy West London

Who am I?

Neil Corcoran – Engineering and Technical Manager

Babcock London Fire Brigade

Babcock – London Fire Brigade Fleet Introduction

102 Fire Stations in London – Busiest is Soho

Maintain 400 Fire Engines, 52,000 Pieces of Equipment 2 Fireboats

It is a 21 year contract 2014-2035

120 People work on the Contract

£500 Million Pound Contract

We have the tallest ladder in Europe – 64m

We have 2 hours to fix or replace a Fire Engine

Main Workshop is in Ruislip

1,440 vehicle services a year, 11,300 equipment services

View From 64M Turntable Ladder

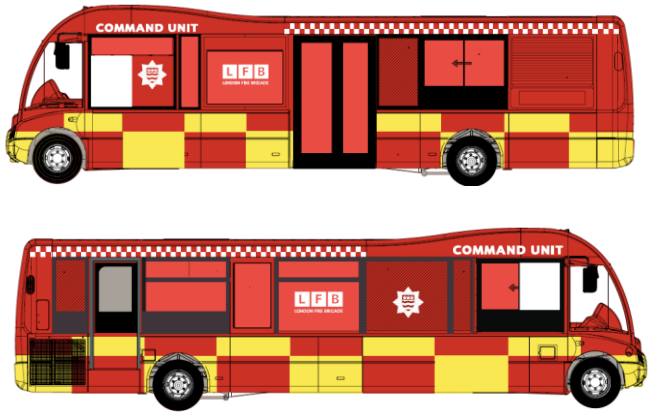
Asset Replacement – Key Vehicle Projects

188x Pumping Appliance

12x 32m Turntable Ladders

3x 64m Turntable Ladders

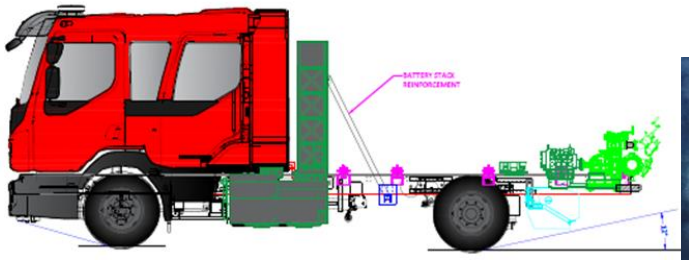
18x Fire Rescue Units

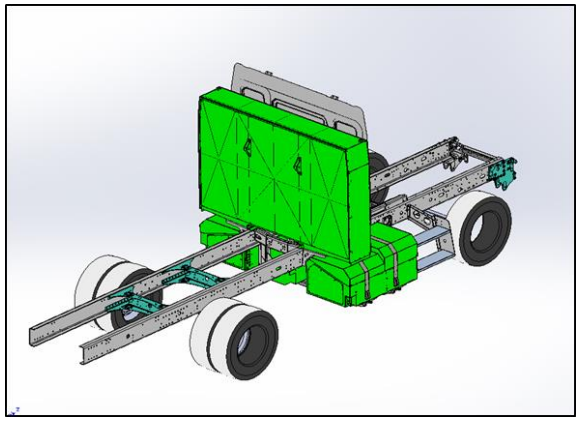


9x Command Support Units

2x Fireboats

2030 Zero Emission Capable – ZEPA1





- x3 Batteries 280kwh total
- DC charging (up to 150kw)
- 200+ non ERD driving range on Zero Emission
- 3.5 hours pumping on Zero Emission
- 8 hours+ with Smart Charger engaged
- Minimal differences from current Series 3 (Operator Training)

Problem……

- All London Fire Brigade vehicles use an internal combustion engine powered by Diesel, a fossil fuel.
- There is considerable political and environmental pressure for LFB to stop using fossil fuels, with a deadline of 2030.
- How can this be achieved whilst ensuring continued and reliable operational performance of the vehicles?

Considerations……

- How do you select which alternative to opt for, e.g. hydrogen, electric, synthetic fuels?
- Infrastructure and availability of these alternatives.
- What to do with existing vehicles; scrap, sell on, modify? Does buying new vehicles not produce emissions during their manufacture?
- Cost to change – 3 x price of traditional for purchase, alternative fuels are circa x 50% more expensive.
- Decision sustainability – if LFB opt for hydrogen, what if the supply of that fuel becomes compromised? What if there is a power cut and an electric vehicle can’t be charged?