

Agenda No .

AGENDA MANAGEMENT SHEET

Name of Committee	Communities Overview and Scrutiny
Date of Committee	8th September 2010
Report Title	Combined Aerial Rescue Platform (CARP)
Summary	Fire and Rescue Service have taken delivery of 2 Combined Aerial Rescue Platform (CARP) appliances. Communities Overview and Scrutiny Committee have asked for an update on progress with commissioning of these vehicles.
For further information please contact:	Jim Onions 01926 423231 Assistant Chief Fire Officer
Would the recommended decision be contrary to the Budget and Policy Framework?	No – Procurement has been undertaken in line with County Council financial regulations.
Background papers	Cabinet paper 7 th September 2006 – FRS Efficiency Savings

Appendices

CONSULTATION ALREADY UNDERTAKEN:-

Details to be specified

Other Committees	<input type="checkbox"/>	
Local Member(s)	<input type="checkbox"/>	
Other Elected Members	<input type="checkbox"/>	Councillor John Whitehouse, Councillor Richard Chattaway, Councillor Chris Williams
Cabinet Member	<input type="checkbox"/>	Councillor Richard Hobbs,
Chief Executive	<input type="checkbox"/>	
Legal	<input type="checkbox"/>	Greta Needham
Finance	<input type="checkbox"/>	Helen Murphy
Other Chief Officers	<input type="checkbox"/>	
District Councils	<input type="checkbox"/>	
Health Authority	<input type="checkbox"/>	

Police

Other Bodies/Individuals Michelle McHugh

FINAL DECISION

SUGGESTED NEXT STEPS:

Details to be specified

Further consideration by this Committee Verbal update for future scrutiny committee when 2nd appliance becomes operational

To Council

To Cabinet

To an O and S Committee

To an Area Committee

Further Consultation

Communities Overview and Scrutiny

8th September 2010

Combined Aerial Rescue Platform (CARP) Fire Appliance

Report of the Chief Fire Officer

Recommendation

- The Communities Overview and Scrutiny Committee consider the report and make recommendations as appropriate

1.0 Introduction

1.1 Warwickshire Fire and Rescue Service operate a number of specialist vehicles to undertake its firefighting and rescue roles. Key to this function is the standard pumping appliance, which is the traditional vehicle that many will associate with the fire and rescue service, it carries a tanked supply of water, various ladders, breathing apparatus, equipment for dealing with road traffic collisions, protective equipment for dealing with hazardous materials and a comprehensive range of tools, breaking in gear and medical equipment. A further familiar type of vehicle is the Aerial Platform which provides for high level firefighting attack and rescue capability from a cage operating up to 28metres from the ground. The Combined Aerial Rescue Pump (CARP) capability combines the functions of both vehicles into one.

1.2 There are numerous benefits of this approach, namely;

- Increased firefighting and rescue capability across the county in the provision of two rescue platforms where previously there had been only one.
- Crews more likely to use the platform equipment as they will respond to incidents with it – rather than having to call the resource on separately.
- Reduced staffing costs, by introducing the CARP capability the Service has reduced its operational establishment by 12 firefighter and officer posts at a saving to the County Council of © £370,000 per annum. A financial saving achieved whilst increasing operational capability.
- Financial saving of £132,000 per annum of annual charge of providing aerial cover in the north of the County from West Midlands Fire Service.
- Small reduction in size of vehicle fleet reducing maintenance overheads.

2.0 Combined Aerial Rescue Platform (CARP)

- 2.1 Warwickshire Fire and Rescue Service will commission two Combined Aerial Rescue Platform Appliances at Leamington Spa and Nuneaton Fire Stations to provide aerial firefighting and rescue cover in the north and south of the county.
- 2.2 The capital expenditure on the vehicles represents a significant investment by the County Council in its Fire and Rescue Service, nonetheless procuring the combined appliances is more cost effective than procuring separate pumping and aerial platform appliances.
- 2.3 The vehicles have the full functionality of an aerial platform combined with rescue and firefighting role of a pumping appliance together with water tank and rescue equipment. Further innovation includes a camera and remote water monitor enabling the vehicle to be positioned for an aerial firefighting attack, but without committing firefighters into the hazard area.
- 2.4 However, the true financial benefits of the CARP is realised by the reduced crewing levels required for the appliances. Introducing the 2 CARPs ensures the Service no longer requires a dedicated crew for an aerial platform appliance – this has saved £370,000 from the staffing budget and £135,000 from charges made by West Midlands Fire Service to provide aerial cover in the north of the County (over £500,000 per annum). The CARPs will help ensure that Warwickshire Fire and Rescue Service is more resilient and self sufficient.
- 2.5 The initial estimate for delivery of the vehicles was very ambitious and hadn't factored in the level of research and contract negotiation that was required. The build programme for the vehicles bespoke to Warwickshire requirements was therefore closer to two years rather than the predicted one year. Further to this there have been modifications conducted on the vehicles at Warwickshire's request to align the CARPs to the Service's precise requirements.
- 2.6 The CARPs by their very nature are complex fire and rescue appliances, and this complexity did lead to some early reliability problems. Many of these problems related to computer software programmes that control 'fail-safe' devices on the elevating boom sections. Although these fail-safe devices caused early problems, they are vital to the safe operation of the vehicle and they are now working well.
- 2.7 The teething snags have been made apparent by the intense usage that the vehicles are currently receiving during the initial training period. Fire and Rescue Service officers have been working in partnership with the manufacturer to rectify issues, improve functionality and resolve the initial unreliability problems.
- 2.8 Some downtime involving the vehicles cannot be attributed to the vehicles or their design. Some damage was caused to a CARP through a problem

involving a battery charging procedure whilst a second involved damage to a differential that could happen to any vehicle.

- 2.9 Our CARP appliances have been fully tested by firefighting crews to ensure their full functionality before becoming operational.
- 2.10 The complexity of the vehicles has led to an extensive training programme for engineering staff and to ensuring that Firefighters from both Stations are competent in their use. In total over 100 operational and engineering staff have required training in the use of these appliances, this has clearly taken some considerable time to achieve.
- 2.11 Training on the vehicles has also had to include input for drivers to experience the extra weight and length of the vehicles and the new 'rear-steer' configuration.
- 2.12 Fire and Rescue Services have received bad press due their CARPs being too heavy for their axle loadings. Central Scotland, Humberside, South Yorkshire are amongst Service's that have experienced such problems. This has not been the case with the Warwickshire appliances, as our design is fundamentally different as we have specified a three axle layout rather than two axles, giving the vehicles the extra weight capacity required. Therefore our CARP appliances will not suffer the problems others have received nationally.
- 2.13 The Service has also had to undertake changes to its operational procedures and mobilising principles to accommodate the new capability.
- 2.14 The overall delay in commissioning the appliances has not been due to any single issue, but a combination of late delivery, early reliability problems and an extensive training programme for operational staff.
- 2.15 The first CARP will be commissioned and become operational at Nuneaton Fire Station on 6th September 2010.
- 2.16 The second CARP will be commissioned and become operational at Leamington Fire Station on 1st December 2010.

3.0 Recommendation

- The Communities Overview and Scrutiny Committee consider the report and make recommendations as appropriate

Graeme Smith
Chief Fire Officer