

AGENDA ITEM:

REPORT TO:	MERSEYSIDE FIRE & RESCUE AUTHORITY MEETING
DATE:	18TH MARCH 2010
REPORT NO.	CFO/047/10
REPORTING OFFICER:	ASSISTANT CHIEF FIRE OFFICER
CONTACT OFFICER:	AREA MANAGER STEPHENS, EXTN 4315
OFFICERS CONSULTED:	STATION MANAGER HITCHEN
SUBJECT:	PROCUREMENT OF A WATER RESCUE HOVERCRAFT

THERE ARE NO APPENDICES TO THIS REPORT

***A Glossary of Terms has been provided at the end of this report for your reference.**

Purpose of Report

1. To request that Members agree that the Authority has improved its capability to carry out rescues but notes the concerns regarding risks to Firefighters at incidents involving the rescue of persons from mud, ice and unstable ground and approve the procurement of a Rescue Hovercraft to the specification contained within this report in order to provide a safe system of work for Firefighters.

Recommendation

2. That Members:
 - (a) note the improvements to the services resource capability; and
 - (b) note the concerns regarding risks to Firefighters at incidents involving the rescue of persons from mud, ice and unstable ground; and
 - (c) approve the procurement of a Rescue Hovercraft to the specification contained within this report in order to provide a safe system of work for Firefighters.

Introduction & Background

3. MFRS has developed a comprehensive rescue capability that currently includes a rescue response to incidents involving mud, ice and unstable ground utilising a number of different assets. These assets include rescue boats, Hansa Boards and mud mats depending on the risk.
4. Estuarial areas of the River Mersey are inaccessible at low water to the traditional range of rescue boats and are extremely hazardous to access by foot due to large areas of deep shifting mud.
5. Large areas of deep shifting mud are also found around the Garston Channel, at Egremont on the Wirral, at the River Dee in Heswall, on the foreshore at Crosby and at the Southport Marshes.
6. The number of incidents attended by MFRS involving the rescue of persons from mud was 5 in 2006/07, 13 in 2007/08 and 8 in 2008/09. MFRS also attend incidents on other unstable surfaces such as ice and in low level flooding when water is too shallow to utilize boats.

Business Case for the Procurement of a Rescue Hovercraft

7. The emergency response to incidents involving the rescue of persons from mud, shallow water and ice involves the use of Hansa Boards and mud mats.
8. These options are time consuming, physically very demanding and have limitations over large distances. Speed and weight of attack is paramount at incidents of this nature, as it is likely the casualties will be exposed to the elements and so their rescue becomes time critical in order to limit the onset of hypothermia.
9. When responding to an incident on the River Mersey around the Speke and Garston areas the Service encounters access problems that preclude the use of rescue boats. At low water this area is approximately 2 miles wide and would prove extremely hazardous to access using Hansa Boards and mud mats due to deep gulleys and extensive areas of mud. This area covers that used by aircraft on their take off and landing at Liverpool Airport. In June 2000 a plane crashed into the River Mersey on its landing approach killing 5 passengers. Whilst the Service responded to this incident, we were unable to assist in the rescue effort due to a lack of suitable assets.
10. There are currently two UK Fire and Rescue Services (FRS's) with significant identified risks involving rescues from mud that have incorporated the use of Rescue Hovercrafts in their provision of a safe system of work. It should be noted that neither of these FRS's have the type and extent of risk identified around the River Mersey. A number of other FRS's are currently undertaking extensive research into the use of Hovercraft for this type of rescue with a view to procurement.

11. Whilst the Royal National Lifeboat Institute (RNLI) has a Hovercraft located at the New Brighton Lifeboat Station the response time for this vessel to deploy to a life risk incident (assuming sufficient volunteers were available to respond) is such that it is not considered to be a viable rescue option.
12. Accordingly, it is recommended that the Service procures a Rescue Hovercraft on the basis that this represents the only means by which to provide a safe system of work for Firefighters at incidents involving the rescue of persons from mud, ice or unstable ground.

Specification

13. The type of craft required for rescue purposes in estuarial areas would need to be dual engine to provide resilience. It would need to provide a high speed response to ensure rapid intervention at time critical incidents. The craft would need to have a payload sufficient to carry 5 persons plus all associated rescue equipment such as slide rafts (which weigh in excess of 200kg). The craft should be capable of being deployed quickly from a trailer or similar transport method to ensure speed of response. These factors are particularly important when responding to carry out a search to for missing persons or to assist persons in need of rescue.

Equality & Diversity Implications

14. None contained within this report.

Financial Implications & Value for Money

15. Market research has identified that the cost of a Rescue Hovercraft sufficient to meet the specification detailed within this report would be in the region of £120,000. This cost would be met from income generated through providing safety cover on the Runcorn Bridge which was a social enterprise initiative approved by Members within Authority report CFO/182/09. The provision of a Hovercraft may also create the opportunity to generate additional income from water rescue training and safety provision.
16. Operating and maintenance costs (inclusive of insurance) for the craft are anticipated to be approximately £8,000 per year. Initial training supplied by the manufacturers will allow for the achievement of trainer status for MFRS Instructors which will enable in house training to be delivered. This cost will be met from the Search and Rescue Team (SRT) training reserve. PPE provision is as per existing water rescue kit therefore no additional PPE is required. Operating costs for fuel and routine maintenance are based on figures received from Avon FRS who operate a Griffon 380 TD Rescue Hovercraft, all of which will be met from the Operational Equipment Team budget. The Rescue Hovercraft would be alternately crewed by the SRT therefore no additional costs are incurred by the Service in this regard.

17. The estimated asset life for the Rescue Hovercraft is 10 years before a major refit would be required and a total 20 year hull lifespan. Assuming a 10 year life span, a purchase cost of £120,000 and annual operating costs of £8,000, the total cost per year of this investment is £20,000.
18. Given the unique nature of the environment in which the craft will operate its predicted life expectancy, low operating costs and the overriding requirement to provide a safe system of work; this represents a sound investment for the Authority.
19. It is the intention of the Service to explore the opportunities for generating additional funding for this important resource from a range of local partners.

Health & Safety and Environmental Implications

20. It has been identified within this report that a Rescue Hovercraft represents the most appropriate means of providing a safe system of work for Firefighters at incidents involving the rescue of persons from mud around certain areas of the River Mersey. A full risk assessment on the operational use of a Rescue Hovercraft will be undertaken by the Health & Safety Department. The specification document would ensure all environmental implications identified by the risk assessment process are dealt with during the initial procurement process.

Contribution to Achieving the Vision:

“To Make Merseyside a Safer, Stronger, Healthier Community”

21. The provision of a Rescue Hovercraft will significantly enhance the rescue capability of MFRS and is the only means by which to provide a safe system of work for personnel at operational incidents of the nature identified in this report.

Background Papers

CFO/182/09 - Provision of Safety Cover for Balfour Beatty Construction during the refurbishment of Runcorn Widnes Bridge.

Glossary of Terms

Hansa Board: The Mayday Hansa Board is a Foam filled polythene cast rescue sled which is designed in Sweden for mud and ice rescue

Mud Mats: Mud Mats are inflatable 20m mats which are ‘leapfrogged’ in to position across mud to provide a rescue platform

Slideraft: An automatically inflating raft designed to accommodate up to sixty people, used primarily to assist with the evacuation of an aircraft that has landed in water.