

Rescue hovercraft for Gloucestershire

Our first experience of hovercraft occurred during the devastating Gloucestershire floods of July 2007, when an Italian hovercraft crew arrived at Fire Service Headquarters. Following a series of calls, it emerged that the Minister for civil protection in Rome had notified the Prime Minister's Office in London, that the hovercraft were being dispatched. Once clearance was given by Gold Command, the hovercraft were set broad objectives over a five-day deployment covering life risk, humanitarian aid and water distribution to isolated areas.



Having had no previous knowledge or experience of hovercraft, this was a unique and unexpected opportunity to experience their performance in an operational environment. Traditionally, the concern with hovercraft has always been the difficulty to control and manoeuvre a vehicle, which is effectively flying. The most immediate impressive aspect with this type of craft, was their manoeuvrability in confined waterways and their transition across areas off-river, with varying degrees of depth.

A significant event for the hovercraft, was the search for a missing person behind Tewkesbury Abbey. Within 10 minutes, the crews discovered a body in a submerged field and then spent several hours assisting Police Scenes

of Crime Officers in recovering the body. The incident demonstrated the versatility of hovercraft and raised awareness of their effectiveness during flood emergencies.

As normality was gradually being restored to Gloucestershire, the County Council submitted a proposal for hovercraft to a Community Recovery Fund set up by Severn Trent Water Limited, following the loss of drinking water to 350,000 homes. An Outline Business Case was submitted for a project to buy two hovercraft, two 4 x 4 vehicles, trailers and associated equipment.





Following a lengthy period of extensive research and a thorough tendering process, the contract was awarded to Hi-Tech International, to supply the HTI425 and HTI525 rescue hovercraft. The craft were already established operationally in the Italian Fire Service, following the floods of 2000.

The HTI craft operate with an integral fan, which produces both lift and thrust. The thrust can be re-directed by operating rear inverter cups and producing reverse-thrust. This system allows the craft to move backwards, rotate in a stationary position, slow down or stop without 'ploughing' and assists steering control. The vehicles can reach up to 50 mph and 15 mph in reverse, operating across land, swift water, mud, ice and other unstable surfaces, and are capable of negotiating a 500mm step down, making them very effective on the weirs of the River Severn.

The hovercrafts are transported on a break-back trailer, which allows hover-off for deployment and smooth transition to land or water. The segmented skirt is constructed of individual pockets, which act individually on the surface and are simple to replace. Other features include provision of a rescue stretcher, PA system, satellite navigation, xenon headlamps, stainless exhaust and fuel tank options for long duration.



One year after the project initiation, the hovercraft were unveiled at Fire and Rescue Exhibition 2008 in Liverpool, attracting a great deal of interest from visitors. The keys were officially handed over to Chief Fire Officer, Terry Standing, by the Chargé d'affaires for the Italian Embassy, Minister Giovanni Brauzzi. This was followed by a local media launch, where the Director for Customer Relations at Severn Trent, Martin Kane, was given the opportunity to celebrate the partnership and experience the hovercraft in action.

The next stage of the project is to form a small team of pilots and crew, trained to a European standard and Royal Yachting Association (RYA) Level II. It is envisaged that hovercraft will be integrated into the unstable surfaces policy, enhancing the water rescue and rescue boat response, specialising in rescues on mud flats and off-river areas during major flooding events in the County or if called upon, anywhere in the UK.

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