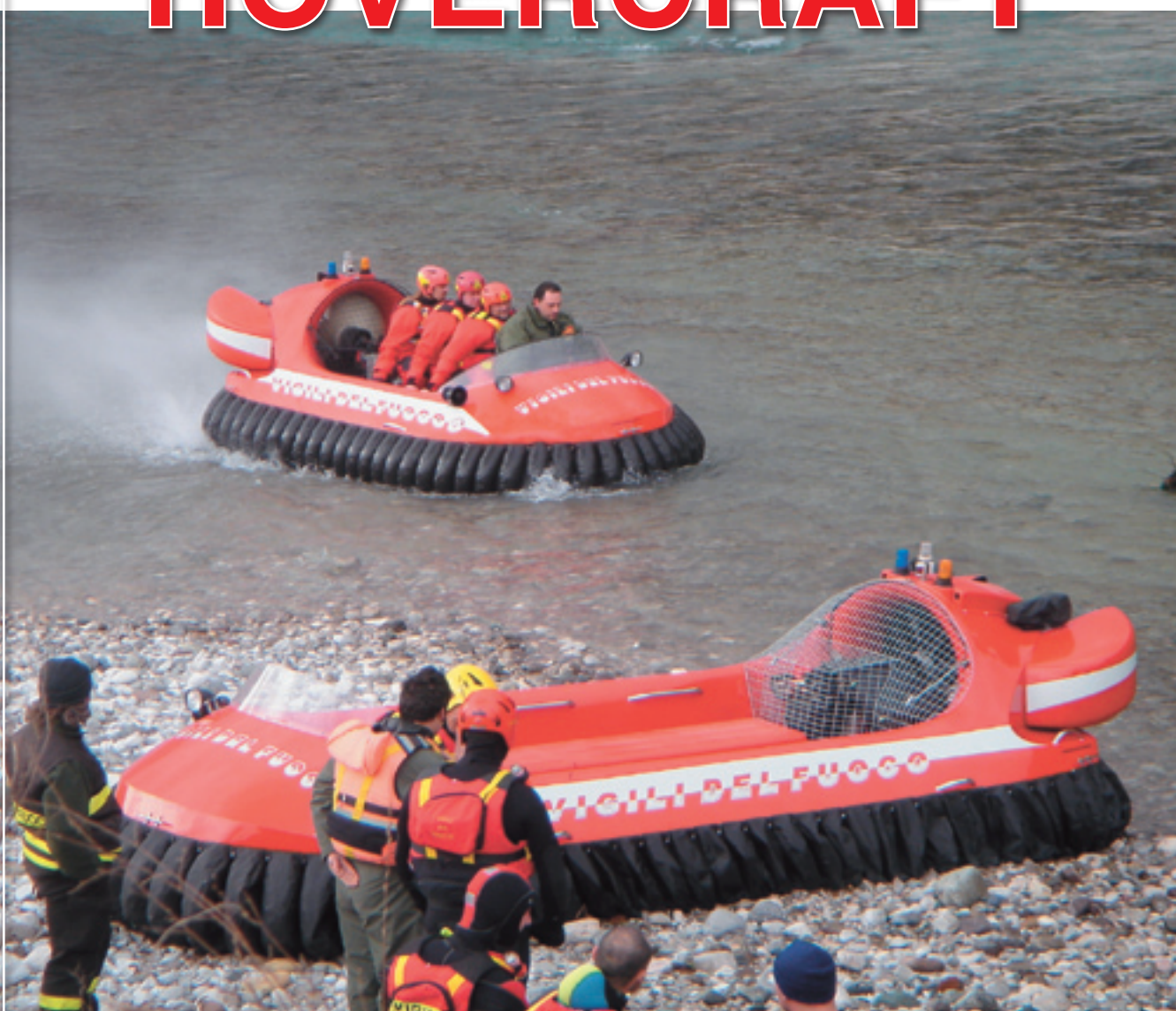


# Air, Land and Sea!

[www.hovercraft.it](http://www.hovercraft.it)

# HOVERCRAFT



European  
Patent  
Office  
**PRODUCT PATENTED**

**Made in Italy**

5 years warranty no excuses guarantee

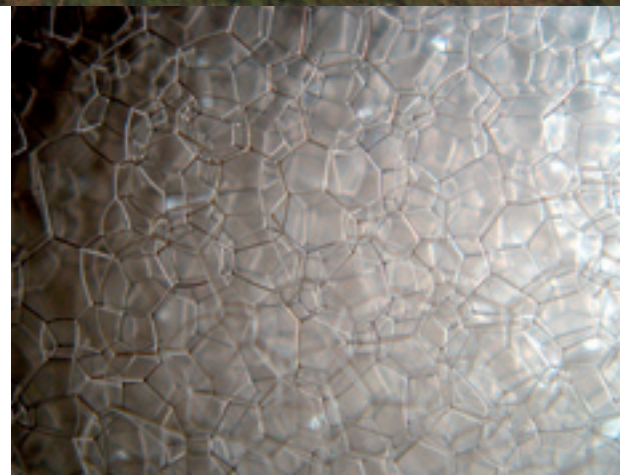


- Over 35 units saving lives on **Duty Today**.
- Available and ready equipped for **Police, Fire and EMS services**.

Quality System Certified  
ISO 9001:2000  
Cert. Nr: 50 100 4509



**Unsinkable:**  
Hull made in **Kevlar & Carbon** (gel coated)  
Filled with  
Closed Cell **Fire Resistant**  
Foam 15 Kg/m<sup>3</sup>



The power of the engine is relevant to the size of the model: from **145** to **15820 HP**. Only **HTI** has hovercraft **ISO 12117** certified and type approved to be used at sea by the Fireservice, Police, EMS...

According to passenger requirements **HTI** offers various models:

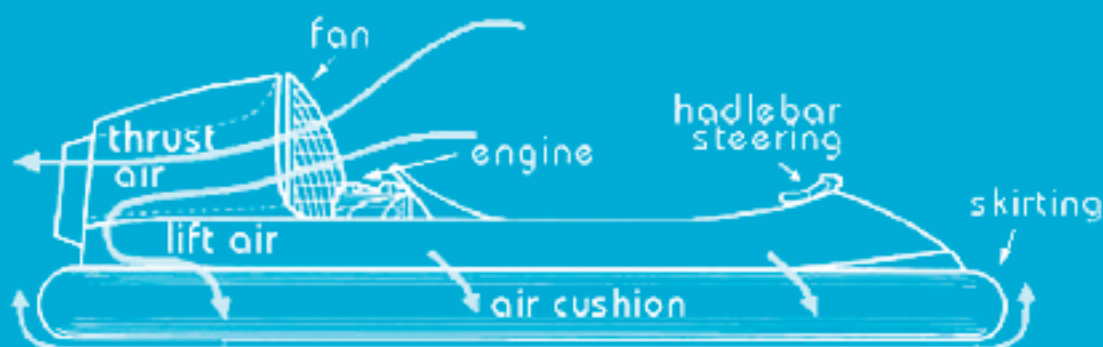


- Hoverescue model 425, for 4 max 7 people of 145 hp
- Hoverescue model 525, for 6 max 9 people of 160 hp
- Hoverguard model 725, for 9 max 15 people of 250 hp
- Vixen model 830, for 11 max 19 people of 350 hp
- Vanair model 1105, for 19 max 25 people of 650 hp
- Textron Marine model LCAC, for 25 max 180 people of 15820 hp

# How does it work?

[www.hovercraft.it](http://www.hovercraft.it)

The hovercraft is an amphibious vehicle supported by a cushion of air. Although often seen as a mysterious, even bizarre mode of transportation, it is conceptually quite simple. To understand how a hovercraft works it is necessary to realize that the dynamics are more closely related to aircraft than to boats or automobiles. As a member of the family of air cushion vehicles (ACVs) or ground effect machines, which includes wing-in-ground effect or ram wings, surface effect ships, sidewall hovercraft, surface skimmers, hovercraft are the amphibious member of the air cushion vehicle family. They are the most novel among vehicles that are supported by pressurized air. Refer to the illustration below as you read about how hovercraft actually function. Hovercraft float on a cushion of air that has been forced under the craft by a fan and contained by the skirts. This causes the craft to rise or lift. The amount of lift can range from 6" to 108" (152mm to 2743mm) depending on the size of the craft. To make the craft function more efficiently, it is essential to limit the cushion air from escaping, so the air is contained by the use of what is called a skirts complex. Fashioned from fabric, which allows a deep cushion or clearance of obstacles, hovercraft skirts vary in style ranging from bags to cells (jupes) to separate fingered sections called segments. Most HTI hovercraft utilize the segmented skirt system because each segment can deflect individually when passing over bumps so that very little lift air is lost on uneven terrain.



Once "lifted" or "on cushion", thrust must be created to move the hovercraft forward. With many craft, this is generated by a separate engine from the one used to create the lift, but with some, the same engine is used for both. As the diagram above indicates, the fan-generated air stream is split so that part of the air is directed under the hull for lift, while most of it is used for thrust. Now that the hovercraft has lift and thrust, it must be steered safely. This is achieved through the use of a system of rudders behind the fan, controlled by handlebars up front. Steering can also be controlled by the use of body weight displacement...a skill which is achieved after practice. HTI hovercraft do have a patented reverse thrust system as another means of control. This is the only system available today that enables the driver to reverse at speed, to maintain cushion at speed, to regulate speed going downwind, to hover while stationary and to actually brake.

Made by: [www.hti.it](http://www.hti.it)



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