

Lifesaving

SEASLED®

Designed by *TAKIMOTO WORKS*



■ Development purpose

We provided jet skis to the local (Settsu) fire services as part of our contribution to society in 2008 in the hope that they make use of them for lifesaving .

However, using jet skis as a method of lifesaving proved to be difficult and we came to understand that this method had problems.

We then started a joint development program with the fire services to solve the problems.

■ Solutions to the Problems.



★ Inlatable boats.

- Difficult to lift a person on board from the water.
- The propeller of the outboard motor is exposed and potentially dangerous.

■ Sea-Sled Features.

- Because the propeller is not exposed, we can approach the person safely
- Mobility, speed, high safety factor.
- Easily lift victims out of the water.
- Administer cardiopulmonary resuscitation immediately.
- Easily transfer victims from water to land emergency services.



■ Concept of development.

The most crucial aspect is
“ Time “

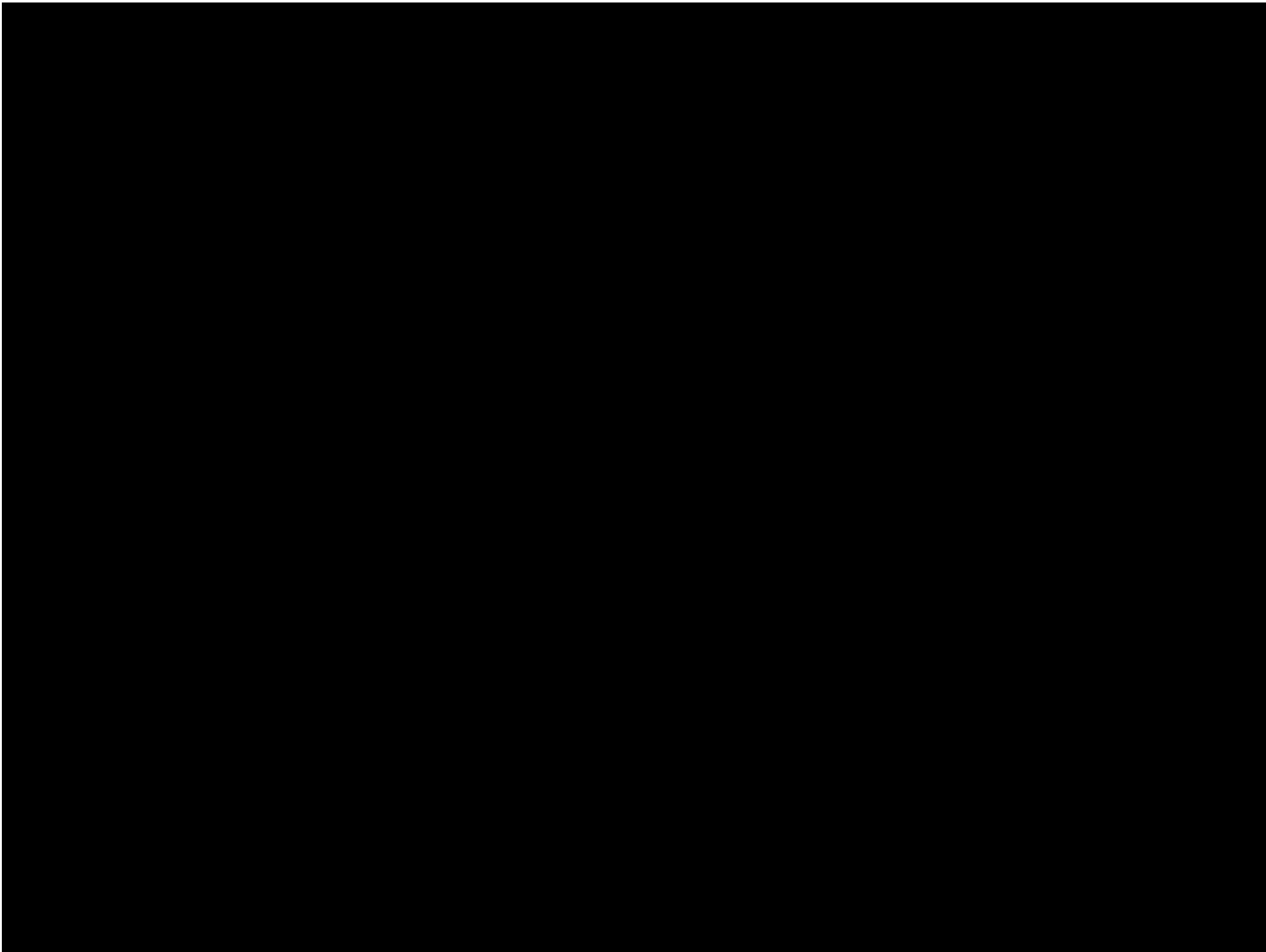
Product Concept

Shortening the time spent from rescue call to initial treatment increases the chances of survival.

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Towing method.

Connection between jet ski and sea-sled is via a carbon fibre shaft.



- High performance is possible by allowing the water to pass under the Sea-Sled easily.
- The catamaran structure increases stability.



- Sea-Sled can lift a unconscious victim easily onto the deck using racing yacht technology.



- Treatment can be given immediately, whilst in transit.



- Transfer victim from water to land emergency services.



Characteristic ①

High Mobility



- Sea-Sled can be towed by trailer.
- Sea-Sled can be launched quickly due to its lightweight body (approximately 80kg).

Characteristic ②

High Performance.



- A top speed of 30 km (16 knots) is achievable with a load of 300 kilos.

Characteristic ③

Safety

Non exposed propeller means rescue activities can be safely performed.



Comparison



PWC



Out board

Characteristic ④

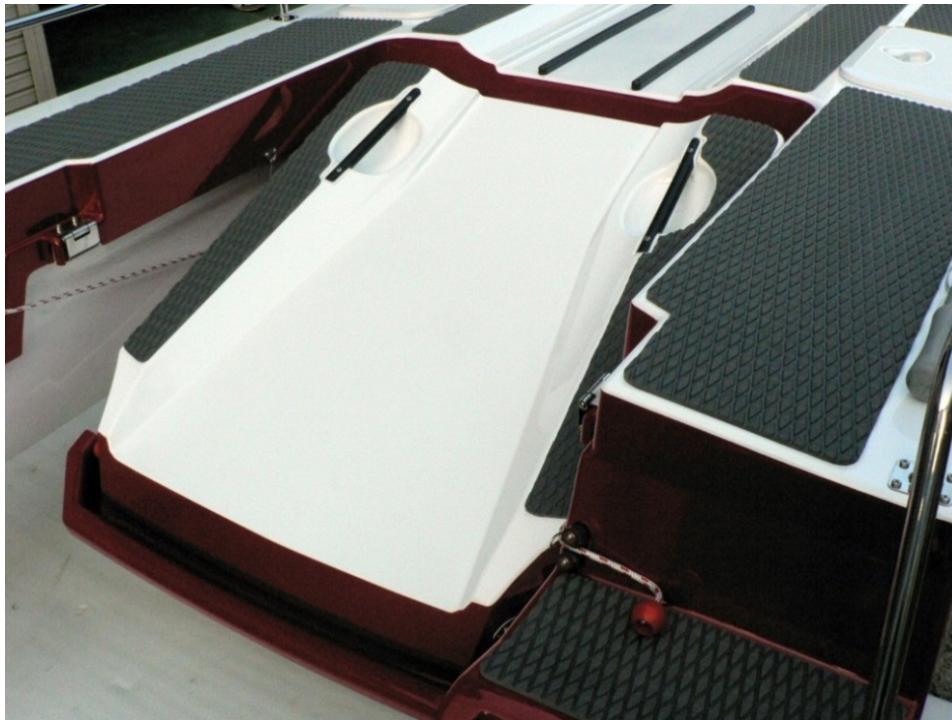
Navigation is possible at a depth of 60cm

Navigation is possible in a disaster area such as a flood due to the jet ski's and the Sea-Sled's shallow draft.



Function 1

Only 2 people are required to lift an unconscious victim quickly on board by lowering the rear quick release ramp.



Function ②

The Sea-Sled automatically straightens itself with the jet ski to ensure a stable and safe approach to the victim; it also ensures that when docking the patient can safely be taken on land.



従来の連結器

1台や複数台であっても水流や潮流、風などの負荷に影響される



水上オートバイ

S·C·T·M

S.C.T.Mの機能により停船すると一直線に整列する



Specifications ①

- Super lightweight body of 80kg only 2 people required to carry the Sea-Sled.
- Through this design, time is drastically reduced.



Carbon fibre is used in the construction of the Sea-Sled

Specifications②

Maximum payload of 300 kg.



Specifications ③

We adopted a catamaran design for superior stability.



Specification④

The tow module was developed to handle a 1600kg tolerance. Due to its special carbon fibre shaft. The Sea-Sled will not be affected should the jet ski overturn due to the S.C.T.M 360 degree rotation ability.



■Additional equipment.

7 prototypes within 3 years and repeated testing saw the completion of the Sea-Sled in 2014. In addition, feedback from rescue party experts and fire fighting services asked for CMC rescue basket compatibility.



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