

Improved Lifesaving

The Survival Aid For Encumbered (SAFE)

Have you ever considered what happens to military personnel when they fall into the water wearing a 30kg of body armour and vest? Without suitable airway protection it is possible they may drown. Current lifejackets may not adequate to support encumbered personnel in open water.

(a requirement for military waterborne operations).

► SAFE can improve the distance between the mouth and the water to an adequate level when a 30 kg armoured vest is worn. This allows the encumbered wearer to more readily breathe.

The SAFE thigh harness not only transfers the load away from the groin to the thighs, the pressure is also reduced, thus making it more comfortable to wear in the water. Existing lifejackets crotch straps may not be adequate when extra load is worn due to excessive pressure on the groin area.

Increased comfort may improve the survival prospects.

Commercial potential

This device has the potential to improve the safety of all heavily encumbered military personnel involved in waterborne operations. It also has wider application for all encumbered users in other government agencies and the commercial field.

Industry assistance required

A provisional patent has been filed for the SAFE. SAFE is currently at Technical Readiness Level (TRL) 3.
The Navy Technical Bureau (in conjunction with DST Group) is seeking interested partners to move SAFE from the workshop to Naval usage.

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The SAFE combines the buoyancy of the existing lifejacket with additional small inflatable bladders attached to the thighs.

If the encumbered wearer finds themselves in the water, their lifejacket is inflated via the manual or automatic gaseous activation system. The SAFE valise is then opened and orally inflated via the retractable inflation tube. Initial testing indicates this system should reduce the risk of drowning in exposed sea conditions.

Benefits and advantages

► The SAFE bladders will be very compact when packed and the supporting thigh harness will be quickly attached and removed from the lifejacket

