



ACCELERATING COMMERCIALISATION

## One Atmosphere – A floating chance

### Customer Story

#### *Helicopter floatation device to save lives.*

When a helicopter crashes into water, fatalities are almost inevitable as the craft sinks rapidly, trapping its occupants. However, an Australian company has devised a potentially lifesaving solution, a sensor-activated buoyancy system that can keep a helicopter afloat.

Tim Lyons, Managing Director of One Atmosphere Pty Ltd (One Atmosphere), which operates from Western Australia and Tasmania, says there are existing floatation devices helicopter pilots can use to execute a controlled ditch or emergency landing on water, but they have limitations in crash situations.

His company's Pegasus Aircraft Buoyancy System detects that a helicopter has crashed into water. Its sensors automatically activate and fill buoyancy bags under the craft.

*“The buoyancy bags are inflated to achieve full volume in less than half a second, which means the device will arrest the sinking descent of the helicopter and return it back to the surface... The main priority is the safety of the crew. Another benefit is that it should allow the black box to be recovered for accident investigation.”*

TIM SAYS.

The Pegasus buoyancy system is made of carbon fibre, which is lightweight, so that it has minimal impact on the day-to-day performance of a helicopter. Military and civil helicopter operators will benefit from the technology.

*“We want to supply the globe with this product and will keep the manufacturing in-house.”*

TIM LYONS, MANAGING DIRECTOR, ONE ATMOSPHERE.

An Australian Government Accelerating Commercialisation grant awarded in April 2015 and expert advice has provided One Atmosphere with critical capital funds to support the development and certification of its technology for market.

Since receiving their grant in 2015, One Atmosphere has been able to diversify the system to cater for both civil and defence helicopters. They are also building and testing a prototype for helicopters with skids.

One Atmosphere has reached into the Oil and Gas market by capsizing a full size aircraft in a demonstration, which will enable sales to this market once certified for flight. The Australian Defence Force also backed initial R&D and the Tasmanian Government is helping the company establish a production facility in Tasmania, where the system will be manufactured.

Tim and his team will continue to re-design the Pegasus electronics digital system and software in preparation for environmental testing which is required prior to final airworthiness certification. Commercialisation Adviser Sheryl Frame says once certification is complete, the company will be well-placed to achieve its global goals.

*“This system has huge international potential because there is a need for it internationally and there is no competitive product,”*

SHERYL SAYS.



One Atmosphere CEO Tim Lyons.  
Photo: Richard Jupe @ Newspix.

View [oneatmosphere.com.au](http://oneatmosphere.com.au)

### Entrepreneurs' Programme

The Entrepreneurs' Programme is the Australian Government's flagship initiative for business competitiveness and productivity.

The [Accelerating Commercialisation](#) element helps small and medium businesses, entrepreneurs and researchers to commercialise novel products, processes and services.

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