

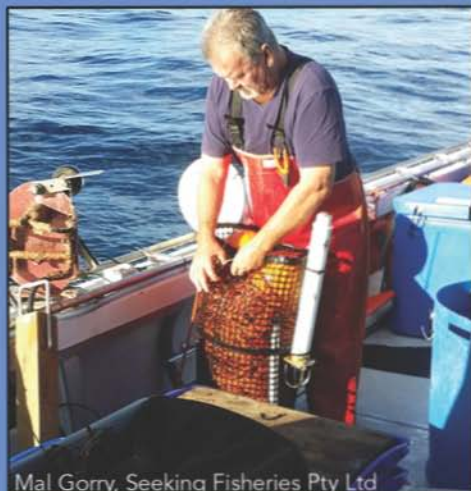


# ARC™

## On-Call Submerged Headgear Systems for Pot Fisheries

Dear pot fisher,

Starting in 2010 our company collaborated with the Department of Primary Industries of New South Wales, Australia and the rock lobster fishing community to develop an 'at call' acoustic release based buoy pop-up system that keeps head-gear submerged until commanded [1][2]. Since 2012, well over 200 of the releases have been purchased and are in continuous commercial use, establishing a cumulative in-water test record covering likely well over 1000 release cycles and over 100 years in the water. It's taken the pioneering efforts of the early fishers, some of whom are featured in this brochure, to get to this point and the clear advantages of the technology are apparent:



Mal Gorry, Seeking Fisheries Pty Ltd

- Submerged head gear prevents trap loss due to ship strike, vandalism, theft, weather etc.
- Access your traps on command using secure trap specific and fisher specific acoustic codes.
- Minimize boat time & cost by keeping gear submerged securely until conditions are right.
- Patented, simple & reliable, fast acting 'fusible link' release mechanism
- Time your catch recovery to coincide with favorable market prices.
- Minimizes 'ghost fishing' and stock depletion by lost traps.
- Greatly reduced gear in the water column reduces the risk of whale entanglement.
- Fully serviceable, long-life gear (5 year old gear in good shape).

This year, we are expanding our acoustic release line with the introduction of the ARC-2XD, a lower cost version with a 'broadcast' release function for fisheries characterized by high trap counts that demand very fast servicing.

Practical ocean technology is a passion at Desert Star. We are looking forward to taking the next step in on-call submerged headgear technology in partnership with you!

Marco Flagg,  
CEO, Desert Star Systems LLC

[1]: Innovation Ends Spectre of Ghost Traps, Melissa Marino, FISH Magazine, December 2011, FRDC Research Code 2007/038

[2] Acoustic Release Technology, Australian Southern Rock Lobster Industry News, February 2014



If you have any questions, need a quotation, or perhaps want to discuss the requirements of your particular business, please contact [info@desertstar.com](mailto:info@desertstar.com)

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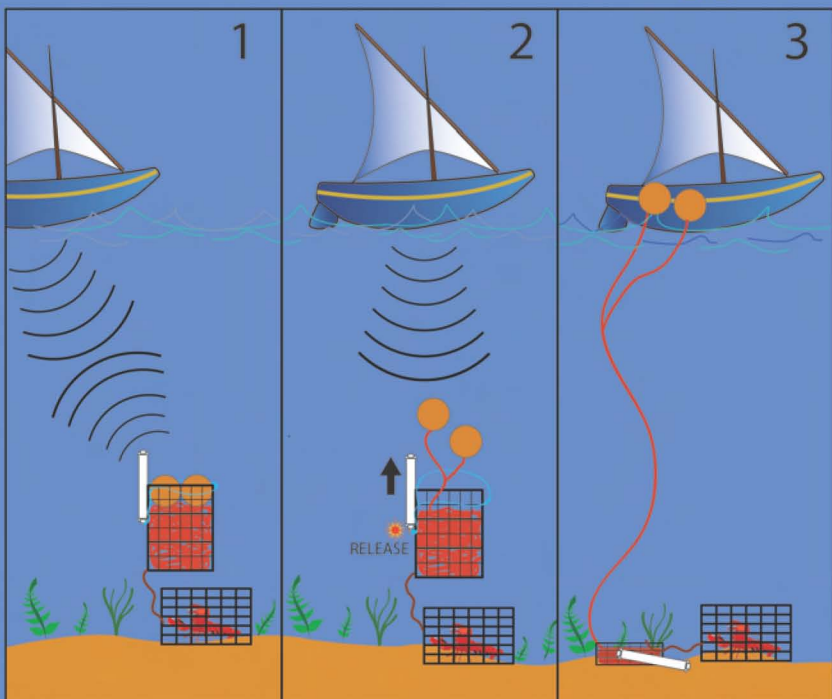
since 1992

# The Fusible Link Release Mechanism

The simplicity of the fusible link release mechanism (U S Patent 7,138,603 B2) translates to reliability. Upon command, a nickel chromium wire is fused using a high-current but safe, low-voltage pulse, opening a lever and setting the release cord free. With careful rigging and operation, Seeking Fisheries Pty Ltd routinely achieves about a 99% auto release rate. The majority of the remainder has been found to be due to non-mechanism factors such as dragged traps or snagged lines.



## On-Call Acoustic Release Technology Review



1. Bag containing 'sunken' rope, head gear and ARC release is tethered to trap, floating about 2-5m above it. Boat approaches, either ranging to an individual release to position boat directly above for fast current operation (ARC-1 only), or broadcasting a fisher specific 'release all' command (ARC-1 and ARC-2).
2. On command, ARC mechanism triggers, setting free the release cord and allowing head gear float bubbles to escape the bag.
3. Head gear float bubbles reach surface, trailing strong rope for trap recovery.









