

SARFISH: Safety Alert for Rock Fishing

Heagney, Isaac (School: St Columba Anglican School)

Rock fishing, the most dangerous sport in Australia, is the third highest cause of coastal drownings. Rock fishing safety has become a priority with councils and governments in Australia. Hence, the aim of this project is to develop a product that would be affordable and accessible for all rock fishermen to improve safety. The SARFISH (Safety Alert for Rock Fishing) is a product that notifies a pre-nominated family member / friend should the fisherman fall into the ocean. The SARFISH utilises two transceivers (one "on shore" and one worn by the fisherman). When the connection between the two transceivers is lost (fisherman falls into the water) a text message is sent to the nominated person's mobile phone notifying them of the incident so that appropriate assistance can be sought. The project involved code and component testing to ensure that all elements were compatible and achieved the design goal. Further testing was conducted to determine the most suitable housing design. This was achieved by developing various prototypes and finally settling on the 100% waterproof laser cut acrylic housing prototype – selected as the housing needed to be able to withstand the harsh rock fishing environment. The testing of the prototype was successful. The SARFISH alert text messages were sent and received and the prototype remained intact. It is evident that the SARFISH has the potential to reduce some of the risks associated with rock fishing and ensures that there can be a level of immediate monitoring and safety, even if fishing alone.