

Australian Government

Department of Defence

Defence Science and Technology Group

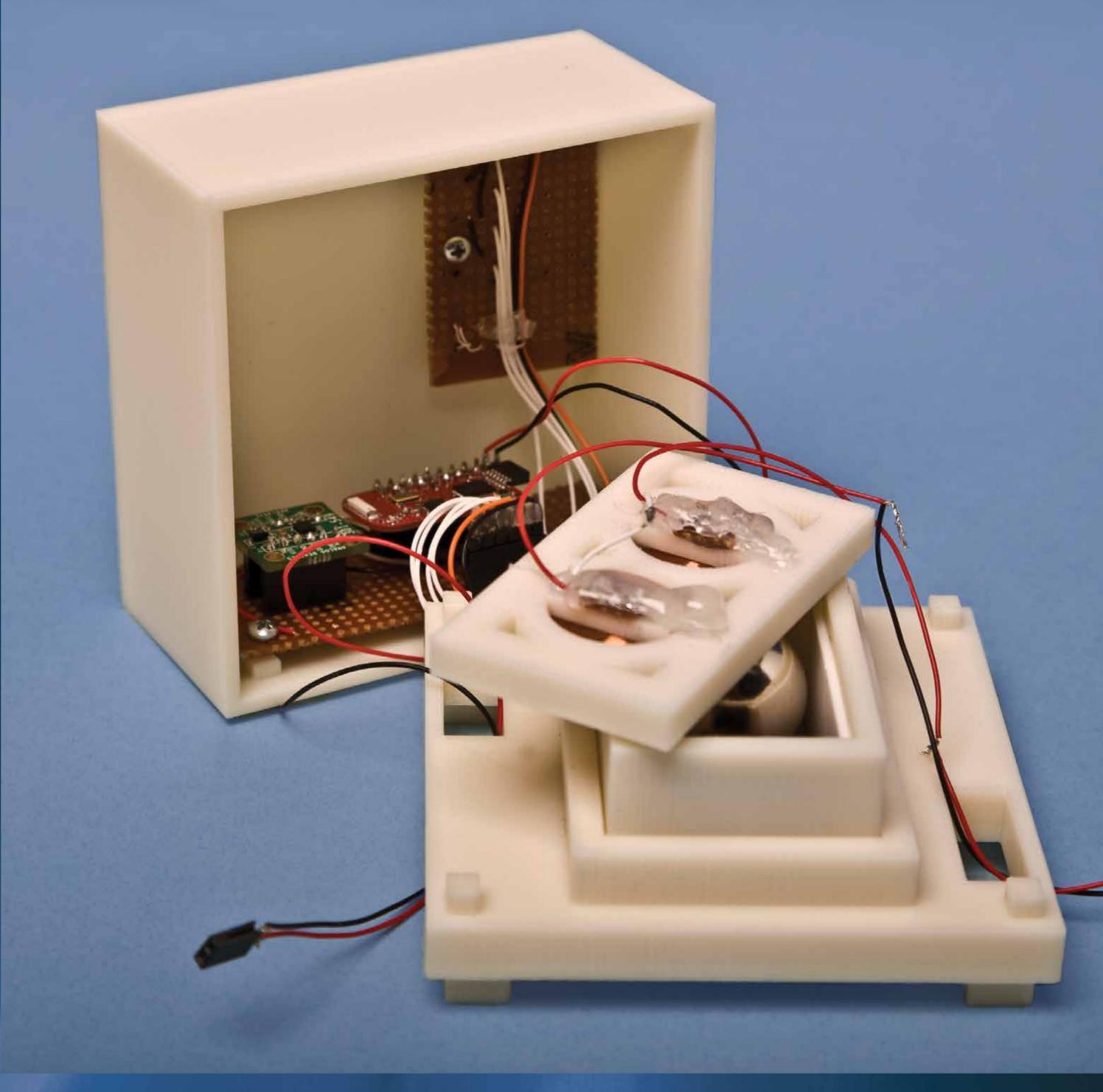
Vibration Energy Harvester

Powering sensors using a vehicle's

own structural vibrations

This novel energy harvesting approach scavenges power from a vehicle's structural vibrations and then converts them into electrical power for use by in-situ diagnostic sensors and devices.

The technology can be used to power applications such as Wireless Sensor Networks, Internet of Things, RFidentification, and Condition Based Maintenance systems.



Multi-axial and with broad frequency bandwidth and high power density, it surpasses current commercial energy harvesters. It is lightweight, simple to install - even in hard-toaccess locations, and has unlimited lifespan.

Unlike traditional powering techniques, no batteries, copper wires or data-buses are needed. Maintenance and certification issues are reduced.

Patents pending. Prototypes currently in laboratory and field tests.

Contact DST Group for further details. Phone: 02 6128 6370

Science and Technology for Safeguarding Australia