



Society of Automotive Engineers – Australasia

ABN: 95 004 248 604

PO Box 103

Werribee Vic 3030 Australia

Phone: 0403 267 166

Email: [info@sae-a.com.au](mailto:info@sae-a.com.au)

Website: [www.saea.com.au](http://www.saea.com.au)

## PRESS RELEASE

### SAE-A Announces the 2017 SAE-A Mobility Engineering Excellence Award Winners

“The SAE-A’s Excellence Awards exist to acknowledge the achievements of the mobility industry’s finest and emerging talent” said SAE-A Secretary & CEO Adrian Feeney. “The Awards recognise the talents of individual and company efforts towards innovation, diversification and continuous product improvement, across the automotive, rail, manufacturing and caravan & camper sectors, as well as high calibre contributions from our undergraduate and postgraduate students.”

“A congratulations to all the winners of the 2017 Mobility Engineering Excellence Awards, it is inspiring to see the resilience and commitment of our members and companies who continue to advance the transport mobility engineering sector. I would also like to thank GM Holden and RACV for their continued support of the Awards” said Mr Feeney.

SAE-A takes great pleasure in announcing the winners of the 2017 Mobility Engineering Excellence Awards.

In 2017 the Platinum award winner for the overall engineering excellence was APV-T Test Centre (Australian Performance Vehicles) for their ‘Bullbar Testing’ project. APV-T Test Centre is an Australian company established in 2011 when the APV group of companies acquired what was formerly the Autoliv Test facility. APV-T is involved in mechanical and environmental testing and is expanding to meet the changing needs of Australian industry.

APV-T’s platinum award winning project identified a need in the market place to offer accessories divisions of automotive OEM’s and Aftermarket bullbar manufacturers, (FVPS – Frontal Vehicle Protection System), a cost effective means of testing bullbars to determine that they are ADR69 compliant and that they do not affect the firing algorithms of airbags in frontal collisions. Fitting of bullbars is highly safety critical to the occupants of a vehicle, and safety systems installed by the vehicle manufacturer can be adversely affected using poorly designed or manufactured bullbars. Good geometry layout, proper choice of materials & fixings, high quality jigs & fixtures, and cognisance of due process to weld pre and post processes are all fundamental requirements to a fit-for-purpose bullbar.

Gold Awards in the Professional Category went to the winners in the categories of Automotive, Manufacturing/Non-OE, and Caravan & Camper.

The Automotive Gold Award was won by GM Holden, for their Automotive Component Manufacture Using 3D Printing Technology.





Society of Automotive Engineers – Australasia

ABN: 95 004 248 604

PO Box 103

Werribee Vic 3030 Australia

Phone: 0403 267 166

Email: [info@sae-a.com.au](mailto:info@sae-a.com.au)

Website: [www.saea.com.au](http://www.saea.com.au)

The Gold Award for the Manufacturing/Non-OE category was awarded to APV-T Test Centre, for their project on Bullbar Testing.

The Caravan & Camper Gold Award was won by Vehicle Components for their development of the Cruisemaster Independent Suspensions.

Gold Awards in the Student Category were awarded in the two categories of Undergraduate and Postgraduate categories.

The Undergraduate Category Gold Award was won by Toby Lawson from Monash University/GM Holden for his 'Cadillac CT6 Engine Bay – HPDC Aluminium Strut Towers.

The Postgraduate Gold Award was awarded to Daniel Aggromito from Monash University/SC Group for his 'Effect of Lumbar Spine Assemblies and Body-Borne Equipment Mass on Anthropomorphic Test Device Responses During Drop Tests.

**ENDS**

**4 April 2018**

**Image Captions:**

2017 Platinum & Manufacturing Gold-Award.jpg  
[Steve Cooper](#), General Manager, APV-T Test Centre

2017 Automotive Gold-Award.jpg  
[Blair Hocking](#) & [Stuart Redpath](#), Applications Engineer, Propulsion Systems, GM Holden

2017 Caravan Gold-Award.jpg  
[Christopher Goddard](#), Managing Director, Cruisemaster (formerly Vehicle Components)

[MEEA 2017 Toby Lawson Undergraduate-Gold-Award.jpg](#)  
Monash University

[MEEA 2017 Daniel Aggromito Postgraduate-Gold-Award.jpg](#)  
Monash University

**For Further Information:**

**SAE-A**

Phone: 0403 267 166

**Adrian Feeney**

Secretary & CEO

Email: [secretary@sae-a.com.au](mailto:secretary@sae-a.com.au)

More information about the specifics of the awards on the following pages.





## Winners Board

---

2017 Platinum Award for Overall Engineering Excellence		<b>APV-T Test Centre</b>
Professional Award	Automotive Category	<b>GM Holden</b>
	Manufacturing/Non OE Category	<b>APV-T Test Centre</b>
	Caravan & Camper Category	<b>Vehicle Components</b>
Student Award	Undergraduate Category	<b>Toby Lawson &amp; Chris Davies</b> Monash University/SC Group
	Postgraduate Category	<b>Daniel Aggromito</b> Monash University

### Overall Winner

## 2017 Platinum Award for Overall Engineering Excellence

### APV-T Test Centre – Bullbar Testing

#### Judges' Comments

APV-T Test Centre developed a bulbar testing system that was an excellent example of well thought out engineering to augment product development. This approach allows a company to produce a well refined product with minimal cost. This in turn allows for the greatest leverage of any R&D budget. The focus enhancing the quality of developed product with the application of textbook like engineering ability left the judges most impressed.

### Professional Award

## Gold Award – Automotive Category

### GM Holden – Automotive Component Manufacture Using 3D Printing Technology.

#### Judges' Comments

This entry concerned the use of 3D printing to reduce the cost of spare part provisioning through the reduction of expensive mass production tooling. Spare parts can represent a significant cost to automakers. Thus, any effort to reduce this expense is an effort well placed. By noting recent trends in 3D printing, this research was well timed and well thought through. The research showed



promising results, but the authors were well reasoned in noting the practical viability at this time. This showed a balance of vision and pragmatic thinking, which the judges liked.

### **Professional Award**

#### **Gold Award – Manufacturing/Non-OE Category**

##### **APV-T Test Centre – Bullbar Testing**

### **Professional Award**

#### **Gold Award – Caravan & Camper Category**

##### **Vehicle Components - Cruisemaster Independent Suspensions.**

#### **Judges' Comments**

The caravan industry is a growing industry in Australia, and to make the most of this current opportunity excellent engineering is needed. This is exactly what was shown in this entry. The development of high performance off road suspension for caravans showed consideration of what was needed, what would be needed and scientific/technical knowledge to make informed decisions on how to improve what was offered. It was the demonstration of these hallmarks of mature engineering that the judges appreciated in this entry.

### **Student Award**

#### **Gold Award – Undergraduate Category**

##### **Toby Lawson - Cadillac CT6 Engine Bay – HPDC Aluminium Strut Towers**

#### **Judges' Comments**

Toby's project investigated the use of 3D printed aluminum for structural application. Given the continuous need for the more efficient use of material through refined geometry and the growing capability of 3D printing, this research project was very timely. By setting HPDC as the bench mark for comparison a sound research method was also shown. While the results were exciting, it was the clear investment in sound research principals and support from the university that impressed the judges.

### **Student Award**

#### **Gold Award – Postgraduate Category**

##### **Daniel Aggromito - Effect of Lumbar Spine Assemblies and Body-Borne Equipment Mass on Anthropomorphic Test Device Responses During Drop Tests.**

#### **Judges' Comments**

Daniel's submission focused on the experimental evaluation of equipment effects upon soldiers subjected to mine blasts. The goal was to find ideal tests to allow for the accurate testing to ensure



Society of Automotive Engineers – Australasia

ABN: 95 004 248 604

PO Box 103

Werribee Vic 3030 Australia

Phone: 0403 267 166

Email: [info@sae-a.com.au](mailto:info@sae-a.com.au)

Website: [www.saea.com.au](http://www.saea.com.au)

human safety. The judges were taken by: the unique nature of the projects context, the focus on human safety, the emphasis on physical experimentation to validate conclusions and the insightful findings on how the mass of equipment was less significant than the method of attachment.

## **2017 Mobility Engineering Excellence Awards Judging Panel**

Clint Steele – Chair, Mobility Engineering Excellence Awards, Bernard Quinn, Prof. Simon Watkins, Andrea Winkelmann

