



# **CAUTIONARY STATEMENT**

This presentation includes statements looking-forward that involve risks and uncertainties. These statements are based upon management's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, that could cause actual results to differ materially from such statements. Actual results and events may differ significantly from those projected in the forward-looking statements as a result of a number of factors including, but not limited to, those detailed from time to time in the Company's Annual Reports. Orbital makes no undertaking to subsequently update or revise the forward-looking statements made in this presentation to reflect events or circumstances after the date of this release.





- 1 2 3 4
- Orbital Corporate Overview, Directors and Management Team
- Unmanned Aerial Vehicle Sector Update (UAVE)
- Industrial Safety & Productivity Sector Update (REMSAFE)
  - Diversification and Growth



# **CORPORATE OVERVIEW**

#### SHAREHOLDERS

JP Morgan Nominees Australia Limited	30.6%
Colonial First State Asset Management	8.4%
Board and Management	6.7%

#### CAPITAL STRUCTURE (OEC.AX)

Share Price (18 Jan 2017)	\$0.80
Fully Paid Ordinary Shares (18 Jan 2017)	77.3 million
Market Capitalisation (18 Jan 2017)	\$61.8 million
Cash (31 December 2016)	\$24.4 million
Debt <sup>1</sup> (31 December 2016)	\$8.5 million
Net Assets (31 December 2016)	\$29.7 million

1. Debt as at 31 December 2016, relates to a WA Government facility which amortises with repayments increasing annually until 2023

#### SHARE PRICE & VOLUME





# **DIRECTORS AND MANAGEMENT**

#### Orbital Board of Directors



Terry Stinson Chief Executive Officer & Managing Director



John Welborn Chairman Non-Executive Director



John Poynton AO Non-Executive Director

### Orbital Management Team



Todd Alder Chief Financial Officer & Company Secretary



Charis Law r & Chief Commercial / Officer



Dr Geoff Cathcart Vice President UAVE & Chief Technical Officer



Rob Wilson Chief Executive Officer REMSAFE



**Orbital** consists of two core businesses, each positioned for growth:

# ORBITAL<sup>®</sup>

#### **1. Unmanned Aerial Vehicles**

Orbital **UAVE** develops and supplies state of the art propulsion systems for unmanned aerial vehicles



2. Safety and Productivity

Minimising isolation downtime safely to maximise production

# ORBITAL

# World Leaders in UAV Engines and Systems

# GLOSSARY



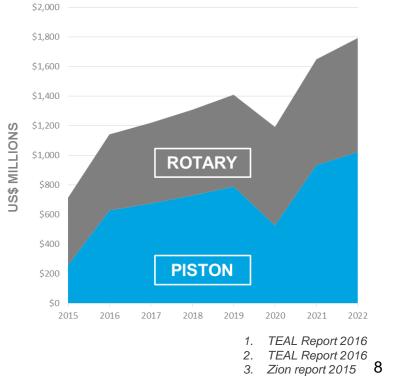
UAVE	Orbital Corp business unit UAVE ('E' for Engines)
UAV	Unmanned Aerial Vehicles
STUAS	Small Tactical Unmanned Aircraft Systems
TUAS	Tactical Unmanned Aircraft Systems
MALE	Medium Altitude Long Endurance
VTOL	Vertical Take Off/Landing



# UAV: GROWTH MARKET

- Orbital UAVE is the global leader in small unmanned aerial vehicle propulsion delivering leading endurance, reliability and power-to-weight advantages;
- Orbital UAVE products and services currently supplying STUAS segment;
- STUAS segment represents only 3% of today's military UAV production market by value<sup>2</sup>;
- TUAS opportunity represents a further 11% of the current US\$3.5b global military production market<sup>2</sup>;
- VTOL a growth market for military and commercial applications, calling for some 70,000 rotary engine VTOL UAVs in 2017 ramping to a projected 180,000 units in 2021<sup>3</sup>

#### UAV Propulsion System Market Projection<sup>1</sup>





#### \*60% of global drone exports come from Israel (*The Guardian Mar2015*)

- Initial \$12M order received Aug15 from Insitu Inc, second \$12M order received Sep16 & long term supply agreement signed Dec16;
- Best in class credentials validated by US FAR 33.49 engine endurance test (first in class to do so) and ScanEagle® test flight success;
- Leveraging Orbital's market leading STUAS propulsion system;
  - TUAS customer discussions initiated and target programs under development; and
  - VTOL customer funded R&D programs underway.

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- Orbital UAVE presenting at the UAV Propulsion Technologies conference in Israel\* (Jan17);
- Exhibiting UAVE's N20 Propulsion System at Avalon's 2017 International Aerospace and Defence Exposition (Mar17).









# ORBITAL®



# **Remote Isolation System**

Minimising isolation downtime safely to maximise production

# WHAT IS REMSAFE?



- Electrical Isolation is a mandatory safety procedure globally for safe work on all industrial plant and equipment
  - Methodology dates back 100 years
  - Often lengthy, difficult, open to error
- REMSAFE is an innovative engineered solution to remotely isolate industrial equipment
  - Reduces operational time lost several hours reduced to ~3 minutes
  - Automates and simplifies isolation process
  - Removes human error and enhances safety
  - Global application
  - Rapid payback
- REMSAFE is designed and implemented to a Safety Integrity Level (SIL) and meets AUS 61508 standards



# **REMOTE ISOLATION MARKET**

- REMSAFE developed originally for bottleneck infrastructure and processing plants:
  - Major conveyors
  - Train loading and load out equipment
  - Port infrastructure
- Current focus on Australia
  - Tier 1 miners have been the early adopters
  - Pilbara Iron Ore
  - Queensland Coal
- Emerging demand from South Africa following Anglo American Coal system
  - Opportunities in overland and underground conveyors and processing plants



Source: QYR Mining Research Equipment Centre



# APPLICATIONS

- Application of REMSAFE is widening from bottleneck mining infrastructure into process plants and underground mining
- New current opportunities include:
  - Coal port facilities
  - Iron ore processing plants
  - Coal float plants
  - Train loading and unloading equipment
  - Underground gold, coal and platinum mining conveyors
  - Processing plants







# **FUTURE APPLICATIONS**



**REMSAFE** can also be used for many other applications that require methodical isolations to reduce risk from human error and improve productivity.





One isolation switch **Two buttons** Three minutes to complete a verified, safe, full-energy isolation to maximise production





- Evaluating potential high growth, mid stage, industrial technology acquisitions to expand and compliment Orbital UAVE and REMSAFE businesses;
- Pursuing acquisition opportunities in USA to align with UAVE USA base and to diversify UAVE product portfolio;
- Strategic goal to diversify product and customer base within Unmanned Aerial Vehicle and Safety & Productivity business segments.



Contact Orbital, or visit the website for further information www.orbitalcorp.com.au

**Orbital Corporation (ASX: OEC)** 

4 Whipple Street Balcatta, Western Australia, 6021 Telephone: +61 (8) 9441 2311



#### APPENDICIES

# **KEY BENEFITS**



**ORBITAL UAVE** is the global leader in spark ignited, jet fuel propulsion systems for Small UAVs:

**Fuel Efficient** Up to 40% better than today's conventional engine

> Small Package Size Engine High power-to-weight ratio

Fuel & Oil Tank System Light weight

Electronic Control Unit Light weight military specification

#### **Specialised Muffler**

Minimises noise and temperature profile



Revolutionary proprietary fuel & combustion system



# COMPETITIVE ADVANTAGE



Orbital's patented proprietary **FlexDI<sup>™</sup>** technology is the difference that delivers the world class heavy fuel performance:

	Turbine	Diesel Compression Ignition	External Heaters etc.	High Pressure Direct Injection	Others/ Experimental	ORBITAL URV
Low Cost	×	×	$\checkmark$	×	?	✓
High Power to Weight Ratio	$\checkmark$	×	$\checkmark$	$\checkmark$	?	✓
Cold Start & Operation	$\checkmark$	×	×	?	?	✓
Fuel Economy	×	$\checkmark$	×	$\checkmark$	×	✓
Scalable to TUAS and MALE	$\checkmark$	$\checkmark$	$\checkmark$	×	×	✓
Reliability	$\checkmark$	$\checkmark$	×	?	?	✓
Ease of Logistics & Field Deployment	$\checkmark$	$\checkmark$	×	$\checkmark$	?	✓