Lockheed Martin Australia

Product Agnostic Test Facilities to Support Safe Production of Guided Weapons & Explosive Ordnance Products in Australia

LOCKHEED MARTIN
AUSTRALIA

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Interoperability & Interchangeability



Australian components & products qualified on multiple platforms in global supply

Staged Approach

- 1. Existing Components
- 2. Existing Sub-systems
- 3. Existing Products
- 4. New Aus Products



Product Agnostic Approach









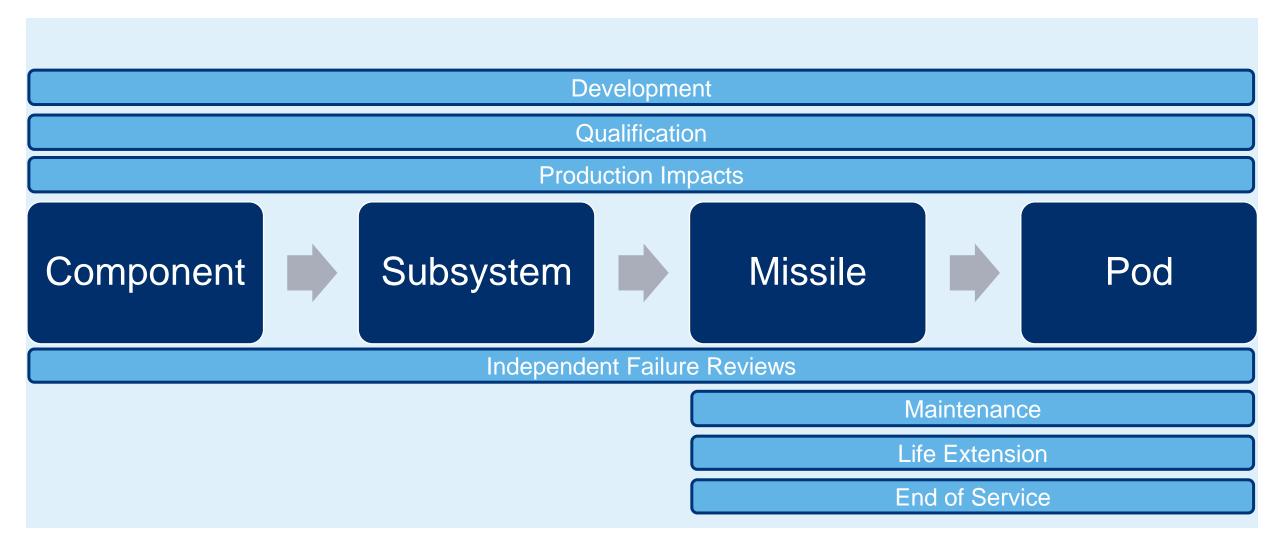
Identification of capability applicable to USA Government Standard

Example Products

- GMLRS
- GMLRS-ER
- ATACMS
- PrSM
- HIMARS
- M270



Where does testing fit?



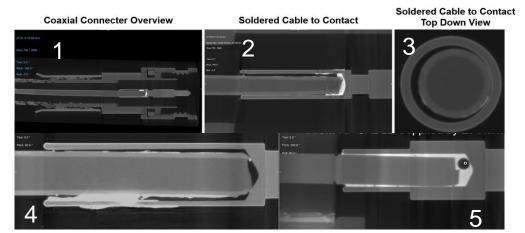
Capabilities Considered (Missile Focused)

Capability	Test Level	Exists in Australia?
CT-Scan	Component, Subsystem	Yes
X-Ray	Component, Subsystem, Missile	Yes
M&P	Component, Subsystem, Missile, Pod	Yes
Microscopy	Component, Subsystem	Yes
EMI/EMC	Subsystem, Missile, Pod	Yes
Centrifuge	Component, Subsystem	Yes
HALT/HASS	Component, Subsystem	Yes
Vibration & Shock	Component, Subsystem, Missile, Pod	Yes
Thermal Conditioning	Component, Subsystem, Missile, Pod	Yes
Energetics Lab	Component, Subsystem	Yes
Salt Mist, Rain, Ice, Sand, Temp	Pod	Yes
Near Strike Lightning	Pod	No

CT Scan Trial with Monash University – Inside Radius

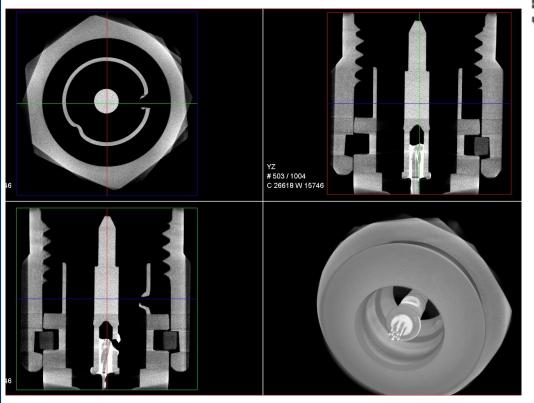
Lockheed Martin (USA)





- Images 1-4 show SMA connector with insufficient solder coverage
- Image 5 shows an acceptable level of solder in the joint

Monash University





Zeiss Xradia 520 Versa



- Free CT-scan trial offered to LMA to demonstrate capability
- SMA connector type bought from electronics store in Australia to use as test specimen
- · Thanks to Monash University

Location Consideration

- 80km radius surrounding major cities
- Consideration outside radius if capability not found within
- 14 sites visited

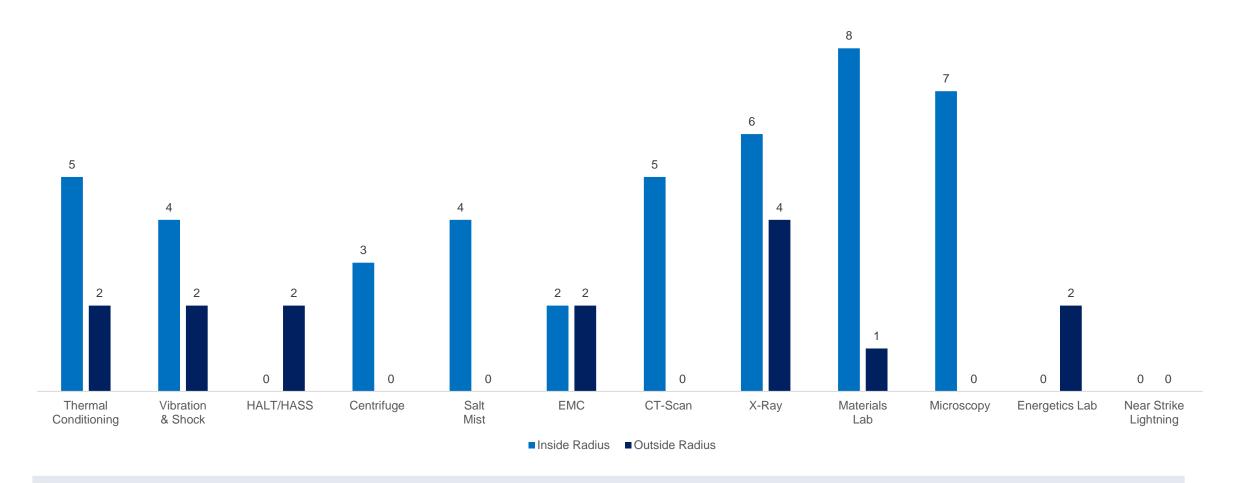
Capability Type	Capability Identified Inside 80km Radius	Capability Identified Outside 80km Radius
Commercial	10	5
Government	3	3
University	4	2

Note: Capability identified as at 3-Oct-2024



Capability Snapshot

Capability Identified Inside and Outside Radius as at 3-Oct-2024



Initial Takeaways: Energetics labs, HALT/HASS, EMC & Near Strike Lightning capability lacking in radius of interest

Depth of Knowledge Required

- Lockheed Martin uniquely understands the requirements of an established weapons ecosystems.
- This is the first step in one of many small activities that is crucial to support the production of Guided Weapons in Australia.
- Without these capabilities the viability of an Australian guided weapons production capability is greatly reduced.
- As part of a national ecosystem, we must execute wholistically and efficiently.

Without a cohesive ecosystem, Australian Guided Weapon Production cannot be sustained.



