Submission to the Inquiry into the Department of Defence

Focus Area: Sovereign Defence Industrial Priorities

Australian does not have Sovereign Capability as all munitions rely on unfettered maritime freight supported by the Chinese Communist Party

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Soldier Safety and reliability Project Pro bono

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About the Author

Andrew Lamb is a Materials Engineer with extensive expertise in Manufacturing, Logistics, and Quality Management. Over the course of his career, he has developed deep capability in cradle-to-grave supply chain management, quality assurance, and compliance across some of the world's most complex industries.

Andrew began his career in the automotive sector, working with Bosch and General Motors where he was responsible for resolving global supply chain issues that spanned customer failures through to minerals processing. His work involved driving quality improvements across international operations and ensuring compliance in environments where precision and safety were paramount.

With the closure of Australia's automotive manufacturing industry, Andrew transitioned into the defence sector. He contributed to major national programs including the Air Warfare Destroyer and Amphibious Assault Ship programs with BAE Systems and ASC, and later held roles with Rheinmetall, Mercedes, and the Commonwealth's Capability Acquisition and Sustainment Group (CASG). These positions gave him direct insight into the intersection of engineering, procurement, and capability sustainment in Defence.

Following the deaths of Craftsman Brendon Payne, 29, and Warrant Officer Class 2 Ryan Leslie, 40—tragic incidents linked to the approval of defective Defence capability—Andrew committed himself to the Soldier Safety and Reliability Project. Undertaken on a pro bono basis, this project has focused on investigating systemic failures in Defence procurement and compliance, and advocating for reforms to ensure ADF members are provided with safe, reliable equipment.

In addition to his Defence-focused work, Andrew has applied his skills in continuous improvement to industrial roles with Liberty Bell Bay and Australian Munitions Benalla. His career reflects a consistent dedication to safety, reliability, and accountability—principles he continues to champion in his current advocacy for reform in Defence capability assurance.

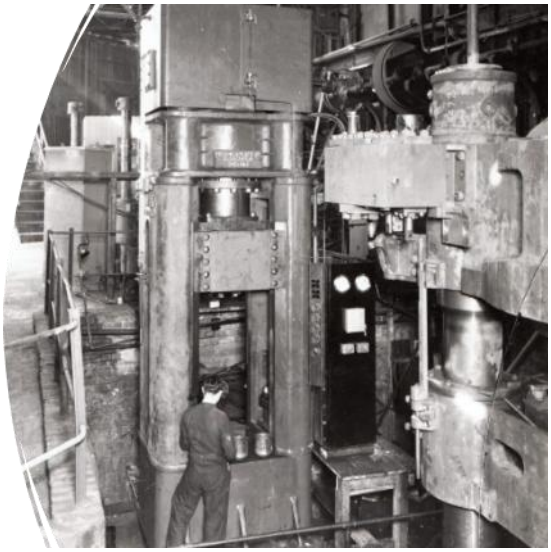
Executive Summary

Australia's munitions production capability is outdated, fragile, and overly dependent on imported raw materials and international logistics chains that are increasingly vulnerable to disruption. Despite being nominally sovereign, Australian Munitions operates on antiquated equipment, under cost-plus contracts that reward inefficiency, and without a business model to modernise or reinvest in capability.

In its current form, Australia cannot sustain an independent, high-volume, high-quality supply of combat consumables. Sovereign capability requires immediate structural reform of contracts, investment in modern equipment, and establishment of independent oversight to ensure quality, reliability, and accountability.

Historical Context

- **1888: The Colonial Ammunition Company (NZ) established the Footscray Ammunition Factory in Melbourne.**
- **1927: Acquired by the Commonwealth Government.**
- **1991–94: Production at Footscray wound down and closed.**
- **1994: New facility opened at Benalla, operated by Australian Defence Industries (ADI).**
- **2006: ADI acquired by Thales and renamed Thales Australia Ltd.**
- **2012: Thales established Australian Munitions, encompassing Benalla and Mulwala.**
- **2021: The Guided Weapons and Explosive Ordnance (GWEO) Enterprise was launched, incorporating Australian Munitions assets and contracts.**



- **Current Artillery and large gun shell line during testing in 1939**

Current State of Australian Munitions

1. **Location and Workforce Limitations**
    - **Benalla is located more than 2 hours from Melbourne's industrial hubs and skilled workforce.**
2. **Antique Equipment and Processes**
    - **Most machinery was transferred from Footscray in 1994; replacements only occur via government grants.**
    - **The newest bullet assembly machines (1986 Fritz Werner) are unstable and require scrap production to stabilise.**
    - **A 1939 Fielding & Platt large case line failed during ramp-up, producing thousands of defective cases and damaging tooling.**
    - **Some operations still depend on equipment dating back to the 1860s.**
3. **Contractual and Business Failures**
    - **Thales operates under a cost-plus contract with a 10% defect allowance (AS1199).**
    - **There is no contractual pathway for reinvestment via efficiency or scrap-reduction savings.**
    - **Production runs are minimal; entire lines operate for one to two months a year, largely producing scrap.**
    - **Examples of systemic waste:**
        - **7,000 defective .50 cal cases per week (~$7,000 loss weekly).**
        - **Riello multi-spindle lathes generate 150–450 defects per inspection cycle.**
4. **Missed Industry Standards**
    - **Australian Munitions bypassed the global zero-defect revolution of the 2000s.**
    - **No systematic adoption of lean manufacturing or quality-assured supply chains.**

Dependence on Imported Inputs

Australian Munitions cannot produce independently. It relies on imports for:

- **Brass**
- **Artillery projectile steel**
- **RDX**
- **Cellulose (propellant)**
- **Toluene (TNT)**
- **Mortar and bomb cases**
- **Primers**
- **Bomb fuses**

Any disruption in global shipping would halt production within weeks.

Maritime Freight Vulnerabilities

Australia's access to shipping and containers is increasingly under the influence of the People's Republic of China:

- **65% of future cargo ships are contracted for construction in China.**
- **92% of all shipping containers are made in China.**
- **Container supply is moving from ownership to lease models, tightening control.**
- **In 2024, 311 container ships made 1,484 visits to Australian ports, carrying ~3 million Twenty Foot Equivalent Container Units.**

China's vertical integration of logistics and the expansion of the People's Liberation Army Navy (PLAN) pose direct risks:

- **PLAN bases in Djibouti and Cambodia intersect key Australian trade routes.**
- **Australia's maritime freight access exists effectively at the discretion of the CCP.**
- **In conflict, Australia may face:**
    - **Denial of freight capacity.**
    - **Electronic or physical disruption of shipping.**
    - **Closure or redirection of sea lanes.**
    - **Pressure on overseas suppliers to withhold materials.**
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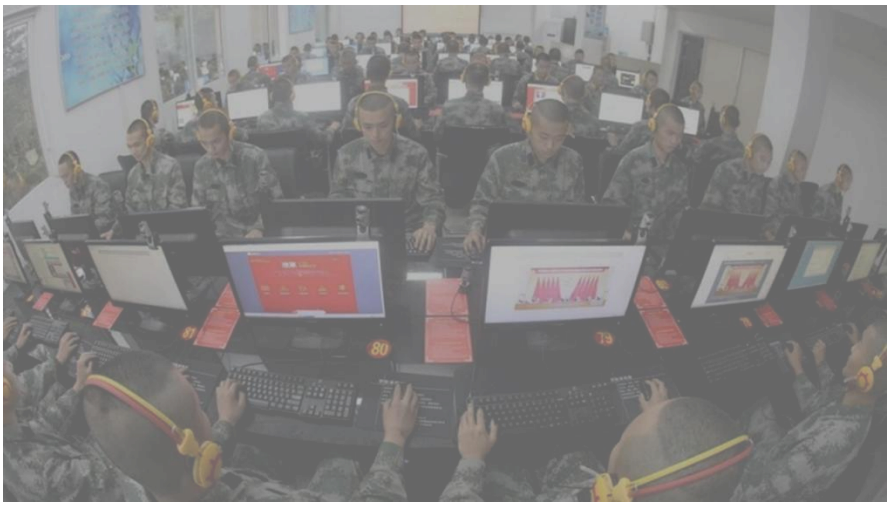

Recommendations

1. **Contract Reform**
    - **Replace cost-plus contracts with zero-defect, fixed-price, and performance-based contracts.**
    - **Require warranted goods and enforce Commonwealth cost recovery through payment denial for defective products.**
2. **Define Sovereign Supply Chains**
    - **Defence must establish clear sovereign requirements for fast-moving combat consumables (e.g., small arms ammunition, artillery, explosives).**
    - **Domestic production of brass, cellulose, propellants, and projectile steel should be treated as strategic assets.**
3. **Direct Investment**
    - **Provide sunk capital funding for critical machinery upgrades and new production lines.**
    - **Avoid reliance on contractor grants or cost-plus reinvestment, which have failed historically.**
4. **Independent Oversight**
    - **Establish an independent Quality and Compliance Agency within the Department of Prime Minister and Cabinet (PM&C).**
    - **Embed key personnel alongside Defence staff to provide real-time audit, compliance verification, and payment approval.**
    - **Ensure that safety, quality, and reliability are enforced independent of Defence/contractor relationships.**

Conclusion

Australia's sovereign munitions capability has been hollowed out by decades of neglect, reliance on antique equipment, and contractual models that reward inefficiency. In a time of growing strategic uncertainty, the risks of continuing under the current model are unacceptable.

Reform is urgent. Without modernisation, sovereign supply chain investment, and independent oversight, Australia cannot guarantee the availability of the very consumables that underpin combat readiness.

Reference

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