

# Air Power: A company with flare | ADM Feb 2011

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**In a first for Australia, 2011 will see the commissioning of Chemring Australia's new \$30 million state-of-the-art manufacturing and development capability for air-launched countermeasures.**

The expanded Chemring Australia facility in Lara, south west of Melbourne, is the only countermeasures manufacturing plant in the southern hemisphere, and one of the safest and most capable globally, according to the company.

Once fully operational, Chemring shall be capable of producing conventional MTV (Magnesium/Teflon/Viton) flares of all configurations and types to satisfy the majority of the ADF's countermeasure needs. The facility is designed so that emerging needs can be met and new technologies incorporated quickly and without the need for major plant modification.

Designed with operational safety as the key design parameter, the facility's main production building is fully automated, negating the need for any operators to be exposed to those hazardous processes such as production of energetic materials. Chemring Australia has worked closely with project management and design consultants, Sinclair Knight Merz, industrial construction specialist, CCB Envico, and the licensing authority Work Safe Victoria, to ensure safety is incorporated into all aspects of site layout, building design, construction and manufacturing processes, utilising world best practice.

Environmental sustainability was also central to the design philosophy, with buildings designed and oriented to reduce energy needs and in excess of one mega litre of bulk water storage established to ensure long term self-sufficiency.

In addition to production, a significant element of Chemring Australia's investment strategy has included the creation of on-shore countermeasures test and technology development capabilities, enabling the provision of related support services to the Department of Defence. These capabilities include performance modelling and simulation, specialist R&D facilities to manufacture small batch product, performance test and analysis and environmental test systems.

A key factor in the successful development of this new capability has been hiring and developing staff. Chemring Australia has grown from 30 people only four years ago to about 70 employees today and expects to recruit more staff as the production facility comes fully online.

Few people in Australia have countermeasure manufacturing experience; however, as managing director of Chemring Australia, Michael Flowers has stated "We found that the people with the right core skills are available locally. The company's approach has been to recruit highly skilled local staff and train them in countermeasures specific elements."

In achieving this improvement in staff capability the company has benefited from funding from the Department of Defence's Skilling Australian Defence Industry (SADI) program.

Underpinning the company's investment in the expansion was a 10-year contract, signed in November 2008, for the supply of countermeasures and pyrotechnics to the Commonwealth of Australia.

Valued at \$160 million over the initial 10 year period, the contract established Chemring Australia as the principal supplier of countermeasures and pyrotechnics to the ADF. Known as the Framework Contract, it incorporates the supply of a wide range of products including locally developed and manufactured Ascend range of military pyrotechnics, products from other Chemring Group companies, as well as the countermeasures to be manufactured in Australia.

The Framework Contract incorporates agreed pricing for all products through the life of the contract along with guaranteed annual minimum order quantities. This assists in smoothing production throughput leading to increased efficiencies in manufacturing. The contract also allows for flexibility in the volumes supplied in order to meet operational requirements of the ADF.

In terms of future business plans, Chemring Australia is targeting the Joint Strike Fighter (JSF) as a key international opportunity and has engaged with Lockheed Martin to examine the Australian manufacture of JSF countermeasures a key opportunity within the Australian Industry Participation Program. A key milestone in this program was met in late 2010 with the approval of a Manufacturing Licencing Agreement (MLA) by the US Government. The MLA provides Chemring Australia with access to the technology and the authorisation to manufacture countermeasure flares for the global JSF fleet.

Modification of the countermeasures facility for JSF flares production is currently planned for 2012. As a key element of the JSF industry program, and given the complexity of the overall JSF program, Chemring Australia is working closely with and being supported by all stakeholders, including the Defence Materiel Organisation's JSF Defence Industry Team, federal and state governments, Lockheed Martin and BAE Systems.

Chemring Australia's air launched countermeasures facility is ready to manufacture current generation flares this year and has plans in place to start production of JSF flares when needed.

The company recently announced that it has teamed with Raytheon Australia and South Korea's Poongsan Corporation to bid for the Domestic Munitions Manufacturing Arrangements (DMMA) project. The DMMA project aims to deliver new commercial arrangements for the manufacture and supply of domestically produced munitions, replacing the Strategic Agreement for Munitions Supply (SAMS) and Mulwala Agreements upon their expiry in June 2015.