First MMP Missile Launch Tube Produced in Australia

South Australian Company Airspeed has made their first composite prototype missile launch tube as part of their contract with MBDA to explore alternative manufacturing methods for MMP, the world's only in-service fifth generation anti-tank guided weapon.

The launch tube was made using toughened, pre-impregnated carbon fibre which has successfully implemented in a number of other high-end applications.

The first MMP prototype tube was manufactured using four axis filament winding, an advanced winding technique offering repeatability and high part quality. Layers of carbon fibre were wound, in helical and hoop windings to create a robust structure with aesthetic appearance.

Airspeeds rapid prototyping saw the missile tube wound, cured and demoulded within 48 hours. With current capacity and the process optimised, Airspeed could easily produce between 30 to 40 tubes a week.

MMP is the most advanced and lowest-risk missile solution for LAND 400 Phase 2 and offers unique technological and strategic benefits to Australia.

If successful with LAND 400, MBDA's vision is for MMP to become the first missile that is built, maintained and evolved in Australia. This creates opportunities for key components, like the missile tube, to be produced by Australian companies. MBDA hopes to include these companies in its global supply chain for MMP and, in the future, for other MBDA systems.

The contract with Airspeed, and their manufacture of the first prototype missile launch tube, is yet more proof of the capability of Australian industry to capitalise on the Federal Government's investment in defence.

High-tech processes used by companies like Airspeed are essential for Australian companies to compete in the defence sector both at home and internationally.

MBDA recognises the importance of Australian companies being able to have opportunities to be integrated into global supply chains and compete around the world.

Airspeed is one of Australia's leading companies in the design and manufacture of composite structures. They are particularly recognised for their low drag electronics pods incorporating design features which allow the rapid integration of mission payloads on military fast jets,

unmanned aerial vehicles (UAV's) and helicopters.

Their world leading composite technology is being used to create a missile launch tube which is designed to withstand the harsh environments encountered on today's battlefield.

A missile in action can see anything from tropical climates to below freezing temperatures and they have to run the gamut of intense vibrations and mechanical shock, salt fog and huge changes in air pressure. It is it is clear that Airspeed's technology could be of great assistance in missile manufacture.

Airspeed uses an advanced multi-axis filament winding technique to form a hollow tube with incredible strength. Central to the process is the pre-impregnated fibres - continuous threads of fibre with a controlled ratio of resin and carbon fibre - the process results in an optimum product of minimum weight coupled with superior quality and surface finish.