



Postcards from the Little Booths at Farnborough

by Robin Ashby

Robin Ashby is Managing Partner of Bergmans Defence Consultancy. He tours a selection of small and medium-sized enterprises (SME) to understand what makes them tick and what their needs are.

At Farnborough in July, Lord Drayson, the UK Defence Procurement Minister, told me: 'I'm committed to a vibrant SME sector in the defence industry, but recognise that for many of the smaller supply chain companies, the route to market is through those companies at the top of the supply chain.'

'We want to ensure that when we enter into partnership agreements with companies at the top of the supply chain, the key sub-tier suppliers are also part of that structure. I am asking trade associations to put forward proposals of how to do this in practice, and I will be happy to receive any representations from members of the supply chain as we go through the thinking on implementation.'

I went out into the show to take a snapshot of UK small and medium-sized enterprises (SMEs) in the defence supply chain. Are they alive and well and, most importantly, innovative? Over a period of six years there were 17 variants of the battle-winning Spitfire – can British industry still do the same sort of thing?

I found a plethora of enthusiastic, tenacious, committed, flexible, ever-changing, loyal, investing, cost-conscious, technically excellent businesses pushing forward. Each of them illustrates in some way issues being raised following the publication of the UK Defence Industrial Strategy.

Many SMEs run in the family. Take John Huddleston Engineering.

Founded in 1964, it's now run by his sons. As soon as Robert opens his mouth you know he's from Northern Ireland. But their logistics centre in Blackpool now

employs twice as many as in County Down. They supply BAE Systems for Tornado and Eurofighter, spares and repairs for Jaguar, and Westland for Lynx. They manage 30 other companies in a supply chain for Spirit Air Systems supplying kit sets direct to the assembly line – including some in the US, Malaysia and France as well as UK competitors.

Eighty-two-year-old Max Selke started the transformation of Reliance Precision 50 years ago. His son James is now MD, and drama-school-trained daughter Helen did the voice-over for the rather good company video. From specialist machine shops in Huddersfield and Cork they now supply defence primes like Thales, Raytheon and BAE Systems as well as medical customers. Sales manager Mel Gibson looks nothing like his filmstar namesake, but his colleagues opined that he'd had a rough show!

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John Runyard's father founded South Dorset Engineering 50 years ago. Westland is a key customer where success is built on relationships and 100% commitment to quality, delivered by a skilled workforce including their own former apprentices. Unsurprisingly, they were the West of England Aerospace Forum's supplier of the year last year.

At the other end of the country, Geoff Ford's Ford Aerospace is another supplier to UK helicopters' number-one builder who

has been a number-one supplier to Westland Transmissions Ltd for two years running.

A long-established company that's made the transition from family ownership is Davall Gears. Founded in 1888 as a watch and clock maker, the last family member retired ten years ago. Although now owned by the Illinois Tool Works, they're on a very long leash – a small cog in a big wheel may be a better metaphor for this niche manufacturer of Spiradrive, a gearing system which is both rugged for gun drives and accurate for missiles. The key to their breakthrough, says MD Geoffrey Watts, was the mathematics and modelling which enabled them to design and check the performance of the system – an echoed tick of the founder's watch perhaps?

Engineering excellence enabled Cleveland Rotary Engineering (CRE) to move from industrial centrifuges to aerospace ones. Some years back a forerunner of MBDA asked boss David Whitlock to build a centrifuge because their previous sole supplier had gone out of business (now there's a warning for consolidating industries!). CRE didn't understand that they shouldn't have been able to design and build it from scratch. They just got on and delivered the order on time and under budget – a disbelieving customer persuaded them to up the price a bit! Their other reward has been increasingly complex follow-ons and an entirely new market.

Kearsley Airways started life as an airline taking part in the Berlin Airlift. Now it has over 70 people employed in component maintenance for the MoD and Marshall Aerospace. Training and employee satisfaction are amongst the keys to their success.

Amongst new technology-derived businesses showing were Water Jet and Hardide. Steve Smith was a sheet metal worker who spotted a market niche four years ago and bought the only CNC rotary

abrasive water jet cutting machine in the UK. Now employing 30 people, he has a string of approvals from defence and aerospace manufacturers and a unique capability.

The Begbroke Science Park was the site of a spin-out from R&D derived from fundamental research originally done jointly by Moscow State University and the Frumkin Institute of Electrochemistry in Moscow in the 1990s. It moved via the oil and gas industry into aerospace and defence. Venture capitalists Flintstone backed Hardide Coatings, now in bespoke premises in Bicester, which employs 30, 40% of them graduate scientists and engineers. Process approvals include Typhoon.

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Some SMEs are very modest. FSL Aerospace describe themselves as the Sainsbury's of the fastener business, 80% of their stocks being held for customers (they have orange uniforms too). But when pressed, you learn that they are procuring basic fixings from the US and Europe, sourcing custom coatings, inspecting to BS 6001 including dimensional checking, packing and barcoding. Kanban trips off their tongues. Not really supermarket-like! And their brochure is a sort of Tardis – small on the outside, a full product list pops out when it's opened.

Advantage Technical Consulting of Farnham is owned by its management and employees, working direct for the MoD and primes like Thales Land & Joint, transferring best practice from rail, oil and gas and power generation industries. But they are cagey about saying more without clearing it with their clients – a not-unusual factor in relationships between biggest and smallest.

Similarly taciturn is Aibly Shelters. This company, with less than 20 employees at Waterlooville, designs and supplies tent-like structures for in-theatre use. They won't say where, except that if the structures come back for refurbishment with sand in the

seams they probably weren't in Scotland! Their knack is that the shelters take only a few semi-skilled men to erect, like their modular engineering workshop or an Apache shelter (even I can guess where that's deployed). Key to their success is a direct and close relationship with relevant MoD IPTs.

Stone Foundries in Charlton and Sittingbourne has defence and aerospace, motor racing and nuclear pedigrees based on the centuries-old technology of sand and investment casting. But it is on the cutting edge of its technology through R&D – including IDEA European funding to help with advances in 2mm-thin wall investment casting. They've developed rapid prototyping (reducing three-month lead times to a couple of weeks) using stereo lithography and CAD to control laser erosion of resin.

A number of these companies fit neatly into the argument made by Alan Sharman of the Defence Manufacturers' Association about just which small companies can truly be described as defence suppliers. Definitions are difficult.

Is it necessary to have a direct relationship with the MoD, despite small size? The tight-lipped Advantage Technical Consultants, Aibly Shelters, and Kearsley Airways are the only companies in the sample to do this. An issue for small direct suppliers is that 'they lack the resources to do as well as the big guys can', says Alan Sharman. 'They need a fair chance of business through competition from the MoD, longish-term secure contracts to make their investment worthwhile and less risky, and the minimum possible bureaucracy in doing business'.

Or a direct relationship with a prime? Many more described earlier achieve this, and indeed it seems to be an important criterion for success. Alan Sharman argues that if an SME's route to market is via a prime, they need to be treated by the primes as primes would expect to be treated by the MoD. Which sounds as if some kind of ombudsman may be required. The comparison with Late Payment of Debts legislation is instructive. How many SMEs dare hit their customer for interest before the relationship has irrevocably broken down?

And exports play a key role in order to sustain a critical mass in the defence industry. This may be direct (for example, John Huddleston Engineering), indirectly

through overseas primes (for example, Reliance Precision), or within overseas ownership (as with Davall Gears).

Alan Sharman also suggests that even if a company is working to DefStans, that doesn't necessarily make it a defence supplier. The defence part of the business is incidental, although it helps that the MoD is spending money and that there is competition to give the innovative SME a route to the market.

This is coming from another direction at an argument made in evidence to the Common Defence Committee by David Bowles of the Northern Defence Industries cluster. He alerted MPs to the possibility that agile SMEs could exit the defence business, along with their innovation, unless the MoD ensures their well-being.

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It can do this especially by planning future defence orders more in accordance with their needs. The Defence Industrial Strategy is already doing something of the sort by placing long-term partnering contracts for major defence capabilities. But David Bowles argues that this must not be used as a mechanism to shut out SMEs. They need competition for market entry, but not so all-encompassing that it becomes an administrative or financial disincentive, especially given long lead times in many bidding processes.

Farnborough 2006 showed the UK defence industry at a tipping point. For the first time in many years, the Government is taking a view rather than just letting the market decide. Maybe this is because major capabilities are under stress as never before.

But the SME sector – or at least that part of it which can afford to exhibit on its own or via a trade group in all those little booths so many of us walk quickly past – is doing well. All it seems to be asking for is a fair crack of the whip on a level playing field, to mix metaphors.

The ball's back in your court, Lord Drayson! ■