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Trends in Airpower Modernisation in the Asia-Pacific Region

Barry Desker

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The global air power industry has gone through a tumultuous phase since the end of the Cold War. The industry is however now recovering, with implications for the industry in the Asia Pacific region. Smaller and emerging players have to adapt to survive.

SINCE THE 1990s, air power in the Asia-Pacific region has been undergoing a process of transformation. This is both in terms of the capabilities being acquired, and in the realm of defence industries. How these trends will eventually play out, the balance of airpower capabilities in the region, the factors leading to shifts in the balance of airpower capabilities: these are questions that continue to challenge strategic thinking in the region.

The Growth of Airpower in the Asia Pacific

The key feature of the airpower modernisation in the Asia-Pacific has been its unevenness. Among the regional giants, China and India are placing great emphasis on modernising air combat platforms and systems, whereas Japan has not, compared to its acquisition of upgraded airpower capabilities prior to the 1990s.

Within Southeast Asia, the patterns are even more uneven. Singapore, Thailand and Malaysia, and to a lesser extent Indonesia and Vietnam, are focusing on the modernisation of air combat platforms with aircraft that are at the cutting edge of airpower technologies. Concurrently, these countries are also beefing up their airborne early warning and command and control capabilities.

Singapore and Australia are also looking into introducing revolutionary capabilities through their participation in the Joint Strike Fighter project. Other countries in the region – Myanmar and the Philippines, in particular – have been relatively quiet, focusing on airpower in support of counter-insurgency operations.

One area where there seems to be more or less universal interest is in UAV or unmanned aerial vehicles technologies. For small states with limited resources, focusing on UAV technologies makes a

great deal of sense. There has also been greater emphasis on the acquisition of advanced air combat missile systems in the Asia Pacific region.

The respective acquisition programmes of various Asia Pacific countries have focused on cutting edge beyond-visual-range air-to-air missiles. In addition, much attention has been placed on the acquisition of increasingly sophisticated air defence systems, ranging from SAM (surface-to-air missiles) to early warning and fire control systems that are needed.

The Global Defence Industry since the End of the Cold War

This modernisation has occurred in the wider context of the global arms market. The 1990s, with its so-called Cold War peace dividend, resulted in reduced budgets for arms acquisition. Countries disarmed and demilitarised, and as defence budgets declined, so too did the demand for new weapon systems. As a result, the world was left with considerably more capacity and capability to develop and produce arms than it either needed or could afford.

The impact on the global arms industry was dramatic and, in some cases, devastating. Firstly, throughout the 1990s, there was an unprecedented restructuring of the arms industry. In the US, the four defence “mega-firms” – Lockheed Martin, Boeing, Northrop Grumman, and Raytheon – emerged as a result of the consolidation of more than two dozen companies. In Europe, the 1990s saw the rise of BAE Systems in the United Kingdom, DASA in Germany, and Aerospatiale Matra in France.

Secondly, defence mergers and acquisitions also began to cross national boundaries, as these emerging defence giants decided to “go global” in seeking out new partners and subsidiaries as well as strategic alliances. Defence industry globalisation in Western Europe reached a climax in late 1999, with the merger of DASA, Aerospatiale Matra, and CASA of Spain into the EADS, which now controls a huge chunk of Europe’s aerospace and defense sector, including Airbus.

Thirdly, the concentration of arms suppliers and armaments production has also been global. The Western defence mega-firms have carved up lucrative business niches for themselves.

While the 1990s was a time of tumult and change for the largest arms-producing countries and the larger defence firms, the first decade of the 21st century has been one of relative stability. Defence spending in Europe has leveled off at a consistent year-on-year rate. In the case of China, India, and other Asian states, defence spending has actually increased in recent years, reflecting their stronger economic performance and accumulation of foreign reserves. The US budget for procurement and R&D has nearly doubled in real terms over the past decade and totaled nearly US\$160 billion in FY2007.

In Europe, many long-delayed programmes – the Eurofighter and Rafale combat jets in particular – are finally entering long-term production. Even in Russia, the outlook is improving for arms producers, as new domestic and export orders are placed for fighter aircraft and missile systems.

Nevertheless, the current situation cannot last forever. As defence budgets begin to fall again or as current arms-manufacturing programmes wind down, the defence business could easily find itself facing another crisis brought on by overcapacity and under-investment.

Implications for Asia-Pacific Defence Industry

So how do global trends affect the defence industry in the Asia-Pacific? The long-term viability of the global defence industry has never been in doubt. However, the same cannot be said for the smaller, “second-tier” arms-producing countries – especially South Korea, Taiwan, Indonesia, and Singapore. For them, the issue is not simply one of dealing with reduced demand and excess defence industrial

capacity – increasingly, it is a matter of sheer survival. In other words, can small arms-producing states persevere in an increasingly competitive and globalised arms marketplace, and if so, how?

These smaller arms-producing states face a challenging – possibly even grim – future. Nevertheless, few countries have exited the business of arms production entirely. Despite growing technological hurdles, programme delays, and cost overruns other factors – particularly perceived national security imperatives, sunk investment costs, and national pride – continue to be very strong impulses acting on most smaller arms-producing states.

Nevertheless, most small arms-producing states in the Asia-Pacific understand that they must deal with the problems of excess manufacturing capacity, preserving defence jobs, and finding new sources of revenue. The more successful of these appear to have adopted a core competencies approach. Singapore, for example, has developed a strong niche in aircraft upgrade packages.

Some have pursued, with varying degrees of success, arms exports or defence conversion as business opportunities: South Korea has had some success in exporting trainer planes, while Singapore, South Korea, and Taiwan have become important commercial aerospace subcontractors for Airbus, Boeing, and Eurocopter. Defence industries in the region which have developed niche capabilities have responded better to the challenging environment.

Finally, the globalisation process that transformed Western defence industry appears to be affecting the Asia-Pacific defence industry as well. This has created an emerging international division of labour in the global arms industry, a “hub and spoke” model consisting of a few large first-tier firms operating at the centre with lines of outsourced production extending out to second-tier states on the periphery. A prime example of this is the F-35 Joint Strike Fighter project, a programme led by prime contractor Lockheed Martin, but with partners in ten other countries, including Australia and Singapore.

For the smaller arms producers, an alternative approach to developing niche capabilities would be to reposition themselves to play a subordinate role in such a globalised division of labour. However, it represents a major departure from self-reliance, which has long been the purpose of these indigenous arms industries.

However, if some Asia-Pacific economies remain committed to possessing broad-based capabilities in arms manufacturing – and we see indications of this in India, China, South Korea, Japan and Taiwan – these economies still face the enduring challenges of efficiency and effectiveness.

If I may be permitted a perhaps controversial assessment, there are two broad scenarios: The first scenario is that however much they may disagree, there are few practical, cost-effective alternatives to the further rationalisation of their national defence industries.

An alternative scenario is one in which the outward-looking growth of Asia-Pacific economies and their increasing capability and skill in manufacturing for global markets will lead the defence industries in these economies increasingly to manufacture for global markets. They will be increasingly influential as global defence manufacturers challenging the current dominance of established defence manufacturers. This second scenario deserves attention as it reflects the economic and political rise of Asia in the 21st century.

Barry Desker is Dean of the S.Rajaratnam School of International Studies (RSIS), Nanyang Technological University. This commentary is based on his address at the Global Air Power Conference in Singapore on 18 February 2008.