## The Development of Malaysian Aerospace Industry

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The development of Malaysian aerospace industry could be traced back to 1983 with the establishment of Aerospace Industries Malaysia (AIM), a three-way equity consortium made up of the Malaysian Government, United Motor Works and Malaysia Airlines (Investors Digest 1993; The New Straits Times 1996, p. 12). The privatisation of Aircraft Inspection, Repair and Overhaul Depot (AIROD) in 1985 marked the nation's first effort to kick-start the country's aerospace industry (The Star 1995, p. 23).

AIROD was originally the Royal Malaysia Air Force (RMAF) maintenance facility for its military aircraft. AIROD is strategically located at the Subang airport complex in Kuala Lumpur. After its privatisation, AIROD became a certified Lockheed Hercules C130 Service Center in the region and has performed more than two hundred maintenance, repair and overhaul operations on C130 aircraft operated by the neighbouring nations' air force.

In 1992, SME Aerospace, a member of the Aerospace Industries Malaysia group of companies, commenced operations at comprehensive manufacturing facilities at Sungai Buloh near Kuala Lumpur, as a premier manufacturer of metal-based aerospace parts, components and assemblies. Since its inception, SME Aerospace has been awarded various contract-manufacturing works for British Aerospace (BAE) Systems Hawk fighter aircraft and Avro RJ/RJX regional jet aircraft, and various models of Airbus commercial aircraft (The New Strait Times 1995, p. 32). A new milestone was achieved in 1995 when the local manufactured MD3-160 Swiss trainer aircraft by SME Aerospace took to the air on its maiden flight on the 25 May 1995 at the Subang International Airport in Kuala Lumpur (Asian Airlines & Aerospace Magazine 1995a; Jurutera 1999). Since then, through various strategic business operations, SME Aerospace has emerged as a major player

in the Malaysian expanding aerospace industry and a renowned contract manufacturer for leading aerospace manufacturers worldwide.

The establishment of Composite Technology Research Malaysia (CTRM) in 1991 to spearhead Malaysia's entry into aerospace and composite industries has moved Malaysia into a new era of composite materials technology. In 1997, CTRM started the manufacturing of Eagle-XTS all composite, two-seater single-engine light aircraft and Lancair Columbia 300 all composite four-seater aircraft at its Batu Berendam factory in Malacca (The New Straits Times 1997, p. 22). A great achievement was recorded when CTRM inked multiple contracts to supply composite wing components for Airbus aircraft A320 series in August 2001 (Sengupta 2001a) and the next generation aircraft A380 in October 2002 (Abas 2002). Since its formation, CTRM has become a leading aerospace composite manufacturing company in Malaysia and a recognised industry player in the world.

In tandem with the nation's vision to venture into the field of high technology aerospace industry, the Langkawi International Maritime & Aerospace (LIMA) exhibition was launched in 1991 as a platform for Malaysia's entry into the international aerospace arena. Further, the launching of the nation's Vision 2020 and the inception of a knowledge-based economy in 1991 have further enhanced the development of the aerospace industry as a high technology knowledge-intensive oriented industry in the country (Government of Malaysia 2001; Ministry of Finance Malaysia 2001). The development of the aerospace industry took another leap when the National Aerospace Blueprint (MIGHT 1998) was launched in conjunction with LIMA 97 to establish strategies and initiatives to transform Malaysia into an international aerospace player.

On a more recent front, the official opening of the Asian Composite

Manufacturing (ACM) plant at Bukit Kayu Hitam, Kedah on the 13th September 2002 marked another successful chapter for Malaysia in developing its fledging aerospace industry (Abas 2002). Asian Composite Manufacturing is a strategic alliance between Malaysian companies, Sime Darby and Naluri, and its US partners, The Boeing Company and Hexcel Corporation. ACM is involved in supplying composite structures for Boeing commercial aircraft and is committed to further enhance Malaysia's unwavering vision and efforts to become a world leader in supplying composite materials to the global aerospace industry. (Sengupta 2001b, p. 7).

In addition to the development of the manufacturing capabilities, there have been significant efforts and achievements in the area of commercial aircraft and components maintenance. In 1996, Malaysia Airlines (MAS) spun off its engineering division to operate as a subsidiary company, known as MAS Aerotechnologies in providing aircraft and engine maintenance and component repair and overhaul. To further expand the industry, MAS has been aggressively building the maintenance, repair and overhaul (MRO) capabilities through joint ventures with original equipment manufacturers (OEM) of engine and aircraft system components. The relentless efforts have resulted in the establishment of Hamilton Sundstrand Malaysia in 1994, GE Engine Services Malaysia in 1997, Honeywell Malaysia in 1998, and Parker Haniffin Malaysia in 1999 to provide engine and aircraft systems components repair and overhaul (Malaysian Aerospace Council 2003, pp. 108-136; Orient Aviation 2000).

Although the development of the Malaysian aerospace industry had started about two decades ago, it is still underdeveloped in comparison to other Asian countries. For example, Singapore, which began its expansion

drive only in the early 1980s, represents a direct obstacle to Malaysia's expansion plans into this sector (MIGHT 1998). It is inevitable that Malaysian aerospace companies are therefore forced to compete with international players right from the start. Despite all the odds, Malaysia is determined to have an aerospace industry that will be globally competitive widely and be acknowledged as its electronics and car manufacturing industries through following the National Aspiration (MIGHT 1998, p. 5). ■

Vision 2020 and the 7th Malaysia Plan are committed to making technology the base for the sustainable growth of Malaysia well into the future. The Aerospace Industry houses core technologies of the future and is therefore seen as strategies gateway to position Malaysia as a technology competent and competitive nation.

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