

ISSUE 3

OPEN TO INNOVATION

Laying the groundwork for new-generation aircraft maintenance, SIAEC plays a key role in developing Singapore's aviation landscape and strengthening the local Maintenance, Repair and Overhaul (MRO) network.

The Maintenance, Repair and Overhaul (MRO) sector has been the stronghold of Singapore's aerospace industry, amassing an impressive compounded annual growth rate (CAGR) of approximately 13 per cent since the 1990s and is responsible for employing more than 20,000 employees today. With aviation being one of the fastest growing industries in the Singapore economy, home-grown company SIA Engineering Company (SIAEC) is looking to further the country's position as a leading MRO hub through pro-business policies and international collaborations.

A world-class leader in heavy aircraft maintenance, SIAEC is ranked fourth in the world for total airframe man-hours in 2008. The company credits its success to a forward-thinking growth strategy based on joint ventures (JVs) with major global aviation leaders. This move has helped SIAEC stay relevant in an ever-changing aviation landscape, seek out emerging markets and propel it to the forefront of aviation.

JVS: CATALYSTS FOR AVIATION GROWTH



William Tan, Chief Executive Officer, SIAEC (right) with Todd Kallman, President, Commercial Engines & Global Services, P&W, at the signing ceremony of SIAEC's investments in P&W's new-generation engine.

SIAEC, a major MRO service provider in Asia Pacific, has established an extensive client base of over 80 international airlines over the years through JVs that capitalise on Singapore's skilled and productive workforce as well as the cutting-edge technology of its original equipment manufacturer (OEM) partners.

"With a model that leverages on Singapore Airlines' (SIA) strengths and our OEM links, we have been able to forge strategic JVs that give us access to OEM markets and customer base loads, and keep us ahead in technology," said William Tan, Chief Executive Officer, SIAEC.

Indeed, the success of JVs can be seen from the expansion of SIAEC's customer base. When the company was listed in May 2000, SIAEC's 12 JVs collaborated mostly with the national carrier alone. However, with the doubling in the number of successful JVs, 70 per cent of the company's revenue now derives from third-party MRO work, in addition to that of SIA's.

Such positive statistics reveal how JVs help ensure the vibrancy of the local aerospace ecosystem through broad as well as deep initiatives. Following the culmination of the recent Singapore Airshow, the latest collaborations include an investment in Pratt & Whitney (P&W); memorandums of understanding (MOU) with Panasonic and Gulf Technics; and the opening of the A380 Hangar at Changi.

ACCOMMODATING AN EVOLVING AVIATION LANDSCAPE

With Singapore looking to transform aerospace manufacturing into a key market, SIAEC has made its first investment in aircraft engine development by having a stake in P&W's PW1000G Risk-Revenue Sharing Programme (RRSP).

A world-leading manufacturer of aircraft engines, P&W is developing the PW1000G, a next-generation engine for single-aisle aircraft such as the Bombardier CSeries and Mitsubishi Regional Jet. As part of a long-term arrangement with P&W, the Eagle Services Asia OEM centre – an SIAEC-P&W collaboration – will be designated as the PW1500G's first global MRO centre.

With aviation being one of the fastest growing industries in the Singapore economy, home-grown company SIA Engineering Company (SIAEC) is looking to further the country's position as a leading MRO hub through pro-business policies and international collaborations.

This move enables SIAEC to remain relevant with the times as the aviation industry sees a growing trend of airlines bypassing MRO centres in favour of OEMs for aircraft servicing. Investing in such an initiative ensures that Singapore keeps in touch with the latest developments in aviation. Tan commented that the new engine will also attract high technology aerospace work, strengthening Singapore's aerospace hub and creating additional high-skilled jobs.

"By scaling up the MRO value chain through investments in PW1000G engine development, SIAEC's seven P&W JVs in Singapore will benefit from the downstream MRO work," he said.

EXPLORING NEW MARKETS

SIAEC's MOUs with Panasonic Avionics Corporation and Gulf Technics highlight the company's commitment to widen its scope by capturing new markets.

SIAEC's MOU with Panasonic will explore the possibility of establishing a JV to provide MRO services for Panasonic in-flight entertainment and communications (IFEC) systems – units built specifically for new-generation aircraft.

As Asia Pacific is set to become a significant contributor to the growth of global aviation, Singapore must offer a one-stop solution for all aerospace activities in order to maintain her edge.

“The JV will cater to the growing market of advanced IFEC systems, which are increasingly being adopted by airlines to enhance passenger appeal. The OEM facility will complement SIAEC's integrated MRO solutions by providing airlines with one-stop turnkey solutions for IFEC upgrades and seamless technical support during operation,” said Tan.

Going further afield, SIAEC's MOU with Gulf Technics will see the company establishing and operating an MRO facility in Bahrain. Tan said, “The establishment of a maintenance base in Bahrain will serve the needs of airlines in the Middle East to avail of high quality engineering services. The base will also be a springboard to the MRO markets in North Africa and Europe.”

A LEADING EDGE IN AVIATION

In a pioneering move, SIAEC has opened up the world's first ever Airbus A380 purpose-built hangar. This high-tech project contains unique features such as the ability to transform from an A380 docking to a B777 docking – a smaller aircraft – via computer-controlled docking. Other advanced work processes include a material management system, which monitors the complete status of an aircraft check.

The establishment of a full-service hangar will make SIAEC fully A380-compatible, with productivity improvements and a shorter lead time adding to the sophistication of Singapore's MRO capabilities. Offering such advanced, high-value services for new-generation aircraft such as the A380 will ensure that the MRO sector remains at the forefront of innovation, as well as bring Singapore one step closer to becoming a global MRO Centre of Excellence. “By retaining high value-add, technologically advanced work in Singapore, we ensure that our Singapore workforce is highly skilled and productive to compete against the best in the world,” said Tan.

USHERING IN NEW-GENERATION AVIATION

As Asia Pacific becomes a significant contributor to the growth of global aviation, Singapore must offer a one-stop solution for all aerospace activities in order to maintain her edge. SIAEC plays a key role in developing the country's aviation landscape by laying the groundwork for new-generation aircraft maintenance, thereby persuading companies to increase their presence in Singapore and strengthen the local MRO network.

Such frameworks will pave the way for the continual ascent of the MRO sector, which forecasts a fleet growth at 3.5 per cent CAGR to 27,231 in 2019 compared to 19,330 in 2009. The MRO sector is expected to grow at a CAGR of 4.1 per cent through 2019.

With such sound infrastructures and forward-thinking strategies in place, Singapore can expect upcoming aerospace investments to add exciting dimensions to its aviation industry.