

# AEROSPACE

The Aerospace sector enhanced its global MRO network of airframe, component and engine services to serve customers better.

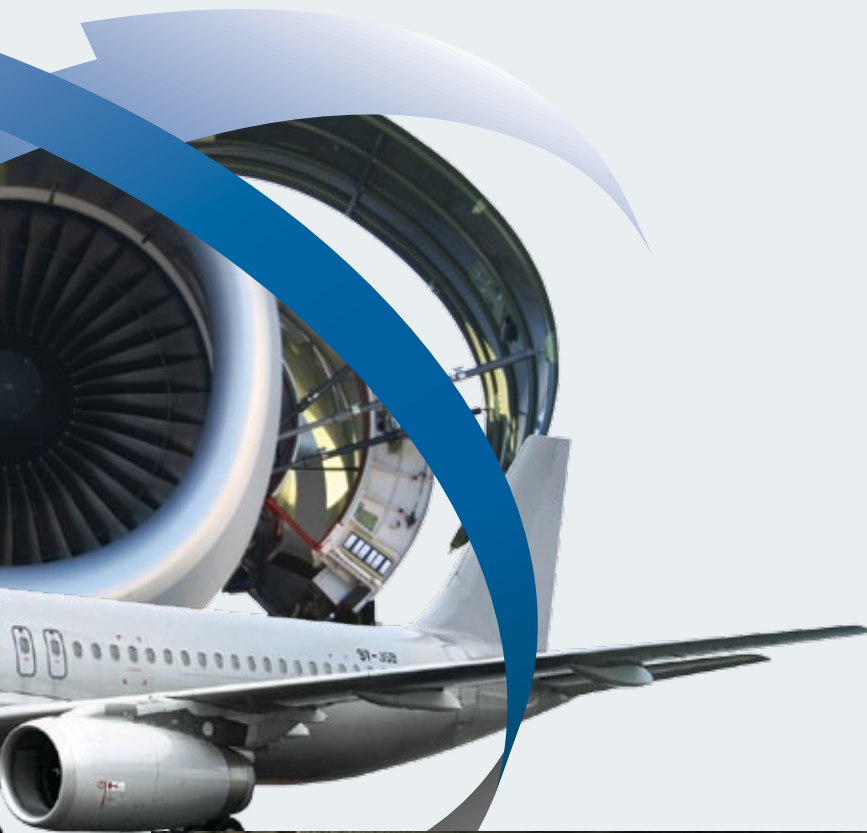
## STEADY PERFORMANCE DURING CHALLENGING TIMES

Revenue for the Aerospace sector was comparable to 2008 despite the global economic and aviation downturn. This resulted from a strong and diversified customer base, new and wide spectrum of capabilities, as well as competitive and integrated service offerings.

ST Aerospace enjoyed continued support from the world's largest airlines and air freight operators, and won new customers such as Aero República, Air Seychelles, Air Transat, Airbridge Cargo, Apollo Aviation, Arrow Cargo, Asiana Airlines, Avborne Component Repair Services, Kingfisher Airlines, Shanghai Airlines Cargo, SpiceJet and Worldwide Holdings. Many customers expanded the scope of their relationship with ST Aerospace. For example, Juneyao Airlines, a customer on the component MBH™ programme, added airframe maintenance and pilot training services.

Strengthening its position as an integrated services provider, ST Aerospace added significant new capabilities including CFM56-5B engines as a new product range for its engines business and to complement services for Airbus A320 customers. Likewise, new components repair and overhaul capabilities enhanced the level of service to customers on MBH™ programmes, while landing gear capabilities were broadened to include Airbus landing gears.





Business interests in commercial and military aviation enable ST Aerospace to leverage dual use competencies and technologies, and the ability to offer a wide range of products and services. ST Aerospace continues to enhance its global maintenance, repair and overhaul (MRO) network to serve customers better, and invest in the training of new and existing employees to assure its quality of service to customers as it grows.

### Aircraft Maintenance & Modification

ST Aerospace's mainstay facilities in China, Panama, Singapore, Mobile (Alabama) and San Antonio in the US supported major airframe customers – large and small – All Nippon Airways (ANA), Delta Airlines, FedEx Express, Japan Airlines, UPS, US Airways and many other airlines.

It signed its second contract with Copa Airlines, covering a fleet of 28 Boeing 737NG, 15 Embraer E190 aircraft, and another 11 E190 aircraft from Copa-owned Aero República in Columbia. The fourth hangar is expected to be commissioned by early 2010.



*Left to right:  
ST Aerospace continued to enhance its integrated service offerings.*

*Redelivery of the 100th L382 aircraft to Lynden Air Cargo.*

*ST Aerospace in Madrid redelivered 30 landing gears in its first year of operations.*

**ST AEROSPACE ENJOYED CONTINUED SUPPORT FROM THE WORLD'S LARGEST AIRLINES AND AIR FREIGHT OPERATORS.**

## ONGOING ENHANCEMENT OF ST AEROSPACE'S GLOBAL MRO NETWORK INVOLVES EXPANDING INTO COST EFFICIENT LOCATIONS TO SERVE CUSTOMERS BETTER.



In April, ST Aerospace celebrated redelivery of its 100th L382 aircraft to Lynden Air Cargo, an Alaskan air cargo charter and transport company that operates a fleet of six Hercules aircraft. This milestone demonstrates the value that ST Aerospace places on all its customers.

Showing the same dedication to defence customers, ST Aerospace increased support for the outsourcing needs of the Republic of Singapore Air Force (RSAF). It also refurbished two (of four contracted) C130 aircraft from the Indonesian Air Force.

ST Aerospace received recognition from the Defence Industry Committee of New Zealand for its innovative and adaptive engineering design, winning ST Aerospace the Defence Industry Award of Excellence. The work involved a quick-change, multi-role freighter conversion and avionics modifications programme for RNZAF on two Boeing 757-200 aircraft.

The year saw ST Aerospace complete a system full-flight acceptance test for an Unmanned Aerial Vehicle (UAV) programme and satellite communications on the Super Puma for the RSAF. In addition, ST Aerospace beefed up its capability for more military platforms such as the Chinook, Apache and F15 Eagle aircraft.

Ongoing enhancement of the group's global MRO network involves expanding into cost efficient locations to serve customers better. Its new hangar at Pudong International Airport in Shanghai, China, is expected to be ready for aircraft induction by first half of 2010.

### Component & Engine Total Support

With the newly launched CFM56-5B product line, ST Aerospace now has the full spectrum of -3, -5B and -7B engines that power the Airbus A320 and Boeing 737 aircraft.

It also broke ground for its second engine facility near Xiamen Gaoqi International Airport in Xiamen, China. The new facility is scheduled to commence operations in 2010, providing MRO and integrated engine services for the CFM56-5B and CFM56-7B engines.

Balancing its portfolio for commercial engine services with a mix of matured, new and future engine lines, ST Aerospace continues to seek strategic cooperation with Original Equipment Manufacturers (OEM) and airlines to develop new competencies and increase value creation through parts and accessories repair.

During the year, it embarked on a 20-year agreement with GE to serve as a GE-approved On-Wing Support provider for the

GEnx-1B and GEnx-2B engines that power Boeing 787 and 747-8 aircraft. Preparations for the On-Wing Support service are underway, and require ST Aerospace to invest in the set up of capabilities, leveraging its global MRO network and close relationships with many airlines that have ordered GEnx-powered aircraft.

In its components business, ST Aerospace added about 400 new repair capabilities to support its MBH™ programmes for the Boeing 737NG, 757, Airbus A320 as well as for A330 and military aircraft. It also built new test facilities for the newer generation of aircraft.

In March, Boeing Integrated Defense Systems recognised ST Aerospace as a Boeing MRO centre for the CH47 Chinook engine transmission. This positions ST Aerospace to undertake more work for other Boeing military aircraft components. Its military service capability on the Chinook transmission will be part of the capabilities Boeing can tap to support users of its Chinook helicopters.

To enhance its integrated service offerings, ST Aerospace continued to add more service centres and other collaborative agreements with various components and aircraft OEMs on military and commercial

*ST Aerospace in Panama successfully redelivered its first E190 and expanded its contract with Copa Airlines.*





Left to right:  
Groundbreaking for a second engine facility in  
Xiamen, China.

ST Aerospace completed the quick-change Boeing  
757-200 combi conversion programme for RNZAF.

products. Agreements were signed with Amfuel, Astronautics, DAe, Eaton, Moog, MRO Aerospace, Revue Thommen, Rockwell Collins, Ruag Aerospace and Thales, among others.

Since commencing operations in Madrid in late 2008, ST Aerospace has seen its landing gear component business take off. Having inducted its first Airbus A320 landing gear inputs and secured the Spanish DGAC and EASA certifications in its first year, it successfully delivered 10 shipsets of landing gears in 2009 alone. It also secured its first external airline customer, SriLankan Airlines. It is now embarking on building capabilities for the

## ST AEROSPACE'S INNOVATIVE AND ADAPTIVE ENGINEERING DESIGN WON IT THE DEFENSE INDUSTRY AWARD OF EXCELLENCE.

A330/340 landing gears, complementing its MRO offering for A320 landing gears. Its components and engines MBH™ support programmes continue to grow in popularity among operators of the Boeing 737 and Airbus A320 family of aircraft. Initially tailored for start-up airlines and low cost carriers, the MBH™ solution achieved some success with traditional airlines too. Over the year, ST Aerospace clinched new contracts with Cimber Sterling, Jeju Air, Primera Air and Shanghai Airlines.

### Half Yearly Performance

Turnover of the Aerospace sector in 2H2009 of \$916m was 4% or \$40m

lower compared to 1H2009. This was due to lower turnover in the Aircraft Maintenance & Modification (AMM) and the Component/Engine Repair & Overhaul (CERO) business groups, partially offset by higher turnover in Engineering & Materials Services (EMS) business group. The reduction in AMM turnover was mainly due to lower redeliveries in the US operations, which was partially offset by higher redeliveries in the Singapore operations. Despite higher components sales in 2H2009, CERO's turnover in 2H2009 was lower than 1H2009 due to high engines inputs in 1H2009. In EMS, all the companies contributed to the turnover increase.

PBT for 2H2009 at \$127.6m was higher than that in 1H2009 by 27% or \$27.0m mainly due to improved profit on the 757 freighter conversion programme and lower allowance for doubtful debts.

### Full Year Performance

Aerospace sector's FY2009 turnover of \$1,872m was comparable to that of FY2008. The lower turnover in AMM and CERO was largely offset by higher turnover in EMS. AMM's lower turnover was due to the redeliveries of two high value multi-role 757-200 aircraft to Royal New Zealand Air Force (RNZAF) in FY2008 and fewer MD11 freighter conversion redeliveries in FY2009, but these were partially offset by more 757 freighter conversion redeliveries. Reduced components sales, partially offset by higher engines sales, accounted for the lower turnover in CERO. All the companies in EMS contributed to the higher turnover.

PBT of the Aerospace sector in FY2009 of \$228.3m was lower than FY2008 by 16% or \$43.8m. The lower PBT was mainly due to fewer MD11 freighter conversion redeliveries and absence

of investment income, but these were partially offset by more 757 freighter conversion redeliveries.

### Acquisitions & Divestments

The acquisition of Precision Products Singapore Pte Ltd was completed in May to support ST Aerospace's business. Precision Products Singapore is a player in the precision investment casting industry and manufactures casting and mould toolings.

### Major Projects

2009 saw more redeliveries of ST Aerospace's freighter conversion programmes.

The programme for FedEx, with four conversion lines – three in Mobile, US, and one in Singapore – is producing aircraft to meet contracted deliveries. Thirteen aircraft were redelivered in 2009.

Two converted Boeing 767-300 aircraft were redelivered to ANA during the year, bringing the total to four of the seven ordered for ANA's fleet. Backlog includes another ten firm orders from Boeing for Q-Aviation.

Two MD11s were redelivered, as this successful programme draws to a gradual close, having converted most MD11 aircraft in operation.

Major milestones for ST Aerospace commercial pilot training were the graduation of its first cohort of 16 cadet pilots from launch customer Shenzhen Airlines, and the launch of a beta trial of its Multi-crew Pilot Licence (MPL) curriculum with Tiger Airways.