HAECO Group







HAECO Group Services 01 e



Interview with Customer

11 •



Company Events 13 e

CSR Activities

14•



Capability Updates

16 •



HAECO Group Companies

18 •



HAECO Group Services

+



Airframe Maintenance e

Freighter Conversion e

Parts Manufacturing .

Line Maintenance e

Inventory Technical Management e

Component Services e

Engine Overhaul e

Airframe Maintenance +



ANA delegation visits HAECO

HAECO management welcomed a senior delegation from All Nippon Airways (ANA) on 3 February, returning hospitality afforded to HAECO's CEO, Mr. Augustus Tang during the airline's Boeing 787 inaugural flight celebration in Japan. ANA is a strategic customer of the HAECO Group, which provides the airline with airframe maintenance services through Taikoo (Xiamen) Aircraft Engineering Co. Ltd. (TAECO) and Taikoo (Shandong) Aircraft Engineering Co. Ltd. (STAECO), as well as line maintenance services in Hong Kong and other stations in Mainland China.

HAECO Group Services | Interview with Customer | Company Events | CSR Activities | Capability Updates | HAECO Group Companies

Airframe Maintenance +



TAECO completes first Boeing 737NG C Check

In early December 2011, TAECO completed its first C check on a Boeing 737NG aircraft belonging to Xiamen Airlines. The successful completion of a heavy check on this new aircraft type was a result of seamless cooperation between the various TAECO departments involved, ensuring a great outcome. The first Boeing 737NG has laid a firm foundation for TAECO to obtain approvals for heavy maintenance on this aircraft type from other aviation authorities. **F**

Freighter Conversion +





TAECO welcomes Thai Airways for BCF programme

In early 2012, TAECO welcomed Thai Airways as its latest customer for the Boeing Converted Freighter (BCF) programme. Two Thai Airways Boeing 747-400s are currently undergoing passenger-tofreighter conversion at TAECO; the aircraft are the 38th and 39th inputs in a total of 50 aircraft that Boeing has contracted to TAECO.

On 8 February, a ceremony was held to celebrate a major milestone in the BCF project: cutting the fuselage skin of the aircraft in order to fit a large cargo door. Mr. Yuthasit Suwanloy, Vice President, Technical Support, Thai Airways, Mr. Dan da Silva, Vice President, Freighter Conversions, Boeing, Mr. Bill Heise, Director, Freighter Conversions, Boeing, and TAECO's CEO, Mr. Patrick Healy, all had the opportunity to put their skills to the test, ably assisting with the cutting of the fuselage under the supervision of long-term Boeing on-site manager Mr. Roy Baerwolf.

The programme achieves consistent turnaround times and superb quality, which is testament to the collective efforts of TAECO's Production Department and the supportive Boeing on-site team.

Parts Manufacturing +



TAECO Manufacturing wins "Gold Supplier" award

In February, TAECO was named "Gold Supplier" by Contour Aerospace, an industry leader in the creation of aircraft seating and cabin furniture, and supplier to the world's major airlines and OEMs. The "Gold Supplier" award is the highest possible recognition for quality, consistent on-time delivery and low discrepancy levels. TAECO has been manufacturing electrical harnesses for Contour Aerospace for the last three years.

TAECO's Manufacturing Department is a Part 21 certified manufacturer, capable of producing machine parts, sheet metal parts, electrical wire bundles, composite parts cutting, panel assembly and cabin interior parts, as well as floor beam assemblies for Boeing 747 BCF aircraft. TAECO is AS9100-Rev C accredited by Bureau Veritas Quality International (BVQI) and has obtained Boeing Quality Management System (BQMS) approval and Nadcap approval for heat treatment, NDT and chemical processing. In addition to Contour Aerospace, TAECO's current customers include Boeing, Primus and B/E Aerospace.

Line Maintenance +



HAECO commences ArIES for Delta Air Lines

On 6 February, HAECO commenced an Aircraft Interior Enhancement Solution (ArIES) programme for Delta Air Lines' Boeing 777 aircraft on layover in Hong Kong. HAECO is currently accepting three aircraft per week from the airline for cabin enhancement; the number of inputs will increase to five per week from 1 April. This is the first time that Delta Air Lines has appointed an MRO in the Asia Pacific region to undertake this type of cabin enhancement programme. ArIES is an initiative aimed at maintaining and improving cabin products for airline customers during long layover ground time. ArIES supports every aspect of defined cabin appearance, including defect and reliability control, In-Flight Entertainment (IFE) defect clearance and recovery, cabin interior logistics and supply chain management, in-situ repairs, carpet replacement and final touch-up of reworked parts. **F**

Inventory Technical Management +



HAECO provides ITM services for CX

HAECO signed a Memorandum of Understanding with Cathay Pacific Airways in relation to the management of the airline group's airframe rotable components. The transaction is expected to yield benefits in component asset utilisation, pool synergy, business scalability, supplier relationships, and physical component repair capability development opportunities, putting HAECO in a strong position to secure potential customers in the Asia Pacific region where continued growth is expected. The HAECO Inventory Technical Management business is based in Hong Kong, with excellent logistics infrastructure and freight network coverage to serve airline needs around the world.

Component Services +



New contract for TALSCO

On 14 February, at the Singapore Air Show, Taikoo (Xiamen) Landing Gear Services Co. Ltd. (TALSCO) signed a contract with China Airlines for the overhaul of 17 ship sets of Boeing 747-400 landing gear. TALSCO will provide China Airlines with technical support, including rotable asset supply, AOG support, configuration analysis, fleet analysis, and sampling inspection for the airline's entire fleet of Boeing 747-400s. The landing gear overhaul programme is expected to be carried out between 2013 and 2015.

Engine Overhaul +



HAESL Seal Fin Cell receives Silver Accreditation

On 7 February, Mr. Steve Dewfall, Head of Engineering, MRO, Rolls-Royce, visited Hong Kong Aero Engine Services Limited (HAESL) to present HAESL's Seal Fin Cell with a Silver Accreditation under the Rolls-Royce Centre of Excellence (CoE) programme.

This recognition is another key milestone for the Seal Fin Cell, which was established in 2009. The award was presented by Mr. Dewfall to HAESL engineer, Mr. Kaiser Cheung, the Seal Fin Cell team, in the presence of HAESL's Director and General Manager, Mr. Richard Kendall.

Over the past year and a half, the Seal Fin Cell team have demonstrated a consistent ability to deliver internal process turn-round times (TRT) and on-time delivery (OTD), in line with the Rolls-Royce CoE programme's requirements. During the period, the facility

has increased its product capability portfolio from seven to 11 components, through a rigorous repair development programme, and has been licensed by Rolls-Royce to perform an additional ten source-controlled repairs.

Since its inception, the facility has seen a continuous growth in workload and product mix. Initially, the Cell output four stub shafts per week; the figure has since risen to ten to 15 stub shafts per week, with no compromise on TRT and OTD performance.

In mid-2011, the Seal Fin Cell team was the first to relocate to the company's new Phase V building. The team's adaptability and efforts to further improve process efficiency in their new environment is vital to the future growth of the facility. The relocation allowed a leaner cell layout to be created with greater in-cell process autonomy.

The Seal Fin Cell received a Bronze Accreditation from the Rolls-Royce CoE programme 18 months ago; the next goal is to achieve Gold Accreditation. **>**

Engine Overhaul +

GEnx engine demonstration at HAECO

In March, GE hosted a GEnx Working Together Team meeting in Hong Kong for airlines that have selected the GEnx engine for their Boeing 787 and 747-8 aircraft. The meeting provided updates on the development status of the Boeing 787 and 747-8 aircraft and their respective GEnx-1B and 2B propulsion systems, and on-going efforts in support of entry into service.

On 13 March, HAECO welcomed a group of 100 guests from airlines, OEMs, GE and Boeing and organised a tour for them to view two GEnx engines housed at the HAECO facility. GE personnel provided the guests with updates and practical demonstrations of key tooling at the Hangar One engine workshop.



 \rightarrow

Interview with Mr. Takuzo Nomura

Nippon Cargo Airlines Senior Executive Managing Director, Engineering & Maintenance



What attributes do you consider vital to an MRO?

Mr. Takuzo Nomura

The HAECO Group has been the MRO partner of Nippon Cargo Airlines (NCA) for 12 years. What are your opinions of HAECO's services - especially Line Maintenance and Airframe Maintenance?

Mr. Takuzo Nomura

HAECO Inventory Technical Management (ITM) provides customised and cost-effective inventory management solutions to customers. How do you see this service benefitting the airline's operations?

Mr. Takuzo Nomura

 \rightarrow

Interview with Mr. Takuzo Nomura

Nippon Cargo Airlines Senior Executive Managing Director, Engineering & Maintenance



How is NCA preparing for the introduction of the Boeing 747-8F into its fleet?

Mr. Takuzo Nomura

The air cargo industry plays a crucial role in the world economy and international trade. At present, what are the major challenges faced by the industry?

Mr. Takuzo Nomura

What are the challenges encountered by NCA in the current state of the Japanese, US, and European economies?

Mr. Takuzo Nomura

What is you view on the market outlook for the aviation industry, in particular, the air cargo industry?

Mr. Takuzo Nomura



HAECO Customer Service Awards 2011

On 10 February, HAECO held its 2011 Customer Service Awards (CSA) presentation ceremony, as part of the annual HAECO Spring Dinner. The occasion was an opportunity for HAECO's airline customers and business partners, as well as senior management and colleagues to recognise the outstanding customer service efforts of recipients of Certificates of Excellence under the CSA programme.

Representatives (in alphabetical order) from Cathay Pacific Airways, Delta Air Lines, South African Airways and UPS, joined HAECO's CEO, Mr. Augustus Tang, at the ceremony, and shared with the other quests how they had been impressed by the remarkable service delivered by the winners.

The HAECO Customer Service Award programme was established in April 2011 and aims to foster a customer-centric culture by promoting outstanding customer service. F





TAECO joins national ecological project

On 3 December 2011, TAECO, joined with six other organisations to launch the "Cool China, Low Carbon Action Plan" in Xiamen. Initiated by the Ministry of Environmental Protection of the People's Republic of China, "Cool China" is a nationwide ecological project aimed at reducing energy consumption and carbon emissions. The project was carried out in five provinces and ten cities including Xiamen, and involved an array of activities promoting a low carbon lifestyle and raising public awareness of environmental protection. Studies reveal that through simple steps such as consuming less bottled water, taking the staircase instead of the lift, driving less and using public transportation more, an individual can reduce his or her carbon footprint by as much as 22 kilograms of carbon emissions per week and one ton per year.

In the past 19 years, TAECO has been taking an active role in efforts to transform Xiamen into a sustainable city. TAECO was the only "Cool China" project member selected from the industrial sector, reflecting the company's proven track record as a good corporate citizen, through the efforts of TAECO's Social Project Association, which began undertaking social and ecological initiatives back in 2008.

2011 Hong Kong Oxfam Trailwalker challenge

On the 18 and 19 November 2011, three HAESL employees took part in the 2011 Trailwalker event in Hong Kong to raise money for Oxfam. This is an annual event in which teams trek for 100km non-stop along the famous MacLehose trail, which winds over some of Hong Kong's highest peaks.

Mr. Stuart Stanyard, General Manager Finance and Mr. Steve Atkinson, Quality & Business Improvement Manager, completed the course in 31 hours and 53 minutes, raising HK\$46,000 in support of Oxfam's charitable activities; 50% of this amount was raised within HAESL.

Mr. Kenny Tsang, Sustainable Development Manager also completed the event with his team, in a year that was described by the event organiser as "the worst conditions of the last decade" — torrential rainstorms over the night of 18 November.



The Oxfam Trailwalker event originated in Hong Kong in 1981 and the event is now held in 12 countries worldwide. In 2011, 3,324 participants completed the course within the 48-hour time limit - 75% of the total number who commenced the race.

HAECO Group Capabilities

AIRCRAFT TYPE	EASA		FAA		HKCAD / CAAC	
	AIRFRAME MAINTENANCE	LINE MAINTENANCE	AIRFRAME MAINTENANCE	LINE MAINTENANCE	AIRFRAME MAINTENANCE	LINE MAINTENANCE
A300 / A310		<u>+</u> +	+	+		<u>+</u> <u>+</u>
A319 / A320 / A321	± ±	<u>+</u> +	<u>+</u> +	<u>+</u> +	<u>+</u> + +	<u>+</u> + +
A330	<u>+</u> +	<u>+</u> +	+	÷	<u>+</u> +	<u>+</u> <u>+</u>
A340	± ±	<u>+</u> +			<u>+</u> +	<u>+</u> +
B737	<u>+</u> +	<u>+</u> <u>+</u>	<u>+ + +</u>	<u>+ + +</u>	<u>+</u> <u>+</u>	<u>+ + +</u>
B737NG	+	+	<u>+</u> +	<u>+</u> <u>+</u>	± ±	<u>+ + +</u>
B747	<u>+</u> +	<u>+</u> +	<u>+</u> +	<u>+</u> <u>+</u>	<u>+</u> +	<u>+</u> +
B757	<u>+</u> +	<u>+</u> +	+	+	<u>+</u> +	<u>+</u> <u>+</u>
B767	<u>+</u> +	<u>+</u> +	<u>+</u> +	<u>+</u> +	<u>+</u> +	<u>+</u> +
B777	<u>+</u> +	<u>+</u> +	+	<u>+</u> <u>+</u>	<u>+</u> +	<u>+</u> +
MD11	÷	<u>+</u> +	<u>+</u>	<u>+</u> <u>+</u>	+	+
CL-600						÷
CRJ-200 / 700					+	+
ERJ170						<u>+</u>

Capabilities also include Line Maintenance services for A380

+ HAECO

🛧 TAECO

Hong Kong Aircraft Engineering Co. Ltd. Taikoo (Xiamen) Aircraft Engineering Co. Ltd. + STAECO

STAECO Taikoo (Shandong) Aircraft Engineering Co. Ltd. **†** SCTAECO

Taikoo Sichuan Aircraft Engineering Services Co. Ltd.

The Group also has approvals on aircraft, engines and components maintenance from the other regulatory authorities across Asia, Africa, the Pacific, the Caribbean and Australia, which include Australia CASA, Bahrain CAA, Bangladesh CAAB, Bernuda DCA, Canada TC, Indonesia DGCA, Israel CAAI, Japan JCAB, Jordan CARC, Kenya CAA, Korea CASA, Macao SAR AACM, Malaysia DCA, Mongolia CAA, Nepal CAA, Pakistan CAA, Papua New Guinea CAA, People's Republic of China CAAC, Qatar CAA, Republic of China CCAA, Singapore CAAS, South Africa SACAA, Sri Lanka CAA, The Fiji Islands CAAFI, The Philippines CAAP, Thailand DCA, Vietnam CAAV, United Arab Emirates GCAA.

Airbus MRO Network

Executive and Private Jet Cabin Completions

- Airbus-approved Completion Centre for Executive and Private Jets
- Boeing Business Jets VIP Completion Centre

Cabin Reconfiguration / Modification

Winglet Modification

- B737 / 757 / 767

Freighter Conversion

- B737-300 / 400
- B747-200 / 300 / 400
- B757-200

Engine Overhaul

- Rolls-Royce Engines (RB211 & Trent)
- GE90 Engines

Landing Gear Overhaul

- B737 / 747 / 757 / 767 / 777

Workshop Composite Repair

- B737NG CFM56-7 T/R
- B777 Trent 800 T/R
- GE90 T/R
- B737 / 757 Flight Control

Wheels & Brakes Repair/Overhaul

Tyre Retreating Services

Aircraft Parts Production & Manufacturing Approved under:

- HKAR-21 POA
- Boeing BQMS
- BVQI (AS9100)
- Nadcap

Design & Engineering

Approved under:

- HKAR-1 E3 Design Organisation Approval
- HKAR-21 Design Organisation Approval
- SAR-21 Design Organisation Approval
- CAAC DMDOR Designated Design Modification Organisation Approval

Maintenance Training & Examination Approved under:

- HKAR-147
- CCAR-147
- EASA Part-147
- SAR-147
- Airbus MRO Maintenance Training Network
- Hong Kong Civil Aviation Department Authorised Aircraft Maintenance Licence Examination Centre

Aircraft Painting

Non Destructive Testing (NDT)

Hydrostatic Test Facility

Approved by:

- U.S.A. - DOT

Calibration Laboratory (CALMET)

- HOKLAS accredited laboratory; Mutual Recognition Arrangement through APLAC on traceability of standards
- CNAS accredited laboratory

