# HAECO Group



ISSUE 8 | DECEMBER 2012





HAECO Group Services

01 e



Company Events

13<sub>e</sub>



Feature

18∘



Interview with Customer

19€



Capability Updates

**21** (



HAECO Group Companies

23 e



# **Group Services**



Airframe Maintenance

Cabin Reconfiguration @

Cabin Completion Centre e

Freighter Conversion e

Line Maintenance

Inventory Technical Management e

Component Services e

Technical Training e

# Airframe Maintenance +



# **HAECO** supports Air Pacific's rebranding

HAECO recently completed a C Check on two Boeing 737-800 aircraft for Air Pacific – the national airline of Fiji and a longstanding HAECO customer.

Air Pacific is scheduled to change its name back to "Fiji Airways" and HAECO will perform the repainting work and maintenance checks on four Boeing 737 aircraft in the new Fiji livery in the summer of 2013.

Air Pacific currently operates twice-weekly flights between Nadi and Hong Kong. As the airline continues to expand its network and fleet, HAECO will extend its maintenance support to its new Airbus A330 aircraft.

# Airframe Maintenance +





# **New customers - Air Astana and Air Baltic**

On 11 September, Taikoo (Xiamen) Aircraft Engineering Co. Ltd. (TAECO) completed the first C Check on a Boeing 767 aircraft for new airline customer Air Astana.

Air Astana is the flag carrier of the Republic of Kazakhstan and is headquartered in Almaty. The airline will deliver three Airbus A320s and five Boeing 757 aircraft to TAECO for maintenance checks during 2013.

On 15 October, TAECO completed its first Boeing 757-200 C Check for another new airline customer, Air Baltic Corporation. TAECO's professional performance in the provision of technical and logistics support and the on-time delivery of the aircraft made a great first impression on Air Baltic, and hopefully marks the beginning of a long-term business relationship between the two companies.

# Cabin Reconfiguration +



# Virgin Atlantic cabin reconfiguration project

HAECO and TAECO have teamed up to undertake cabin reconfiguration work on seven Boeing 747-400 aircraft for Virgin Atlantic Airways. The reconfiguration included the installation of new Premium Economy and Economy Class seats, the fitting of new in-flight entertainment systems, the launch of wi-fi connectivity, and the upgrade of interior furnishings and decor enhancements.

The successful redelivery of the seven aircraft is a testament to the comprehensive engineering capabilities and professional skill provided through the collaboration of HAECO and TAECO. The teams worked so seamlessly that the turnaround time for the last aircraft was four days less than scheduled.

# Cabin Completion Centre +



# TAECO showcases capabilities

In late October, TAECO's Cabin Completion Centre team showcased the Centre's capabilities at the 2012 Macau Business Aviation Exhibition. Organised principally by the China Civil Aviation Technology & Equipment Corporation, this was Macau's first major aviation industry exhibition and attracted participants from a number of major aircraft manufacturers.

The TAECO team took the opportunity to enhance the company's cabin completion profile and connect with business partners and prospective customers in the fast growing business jet market in Mainland China.

# **Freighter Conversion**



HAECO/PEMCO collaboration recognised

On 4 October, China Postal Airlines and PEMCO World Air Services announced a new contract for the conversion of two Boeing 737-400 passenger aircraft into freighters.

As PEMCO's regional partner, the HAECO Group has been working closely with PEMCO on conversion projects for the past eight years. The Group's extensive technical expertise and experience in undertaking passenger-to-freighter conversions on Boeing 737, 747

and other aircraft types, and the fact that the conversions are carried out at TAECO in Xiamen or STAECO in Jinan provides customers with both quality assurance and greater flexibility.

Meanwhile, in the latest Freighter Conversion Customer Satisfaction Survey, conducted by Airline Economics Research, the HAECO/PEMCO Group partnership has topped the poll as best performer in the Asia-Pacific region, coming second globally.

# Line Maintenance →

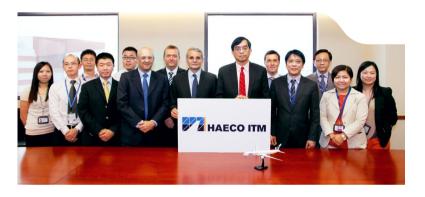


# **HAECO** supports **THAI** Airbus A380 inaugural

On 6 October, Thai Airways (THAI) commenced an Airbus A380-800 daily service from Bangkok to Hong Kong. As the airline's longstanding MRO service provider, HAECO is now supporting the Airbus A380 with essential line maintenance services at Hong Kong International Airport (HKIA). These include aircraft certification and release, as well as the provision of technical assistance, ramp equipment and cabin services.

HAECO currently serves four airline customers that operate Airbus A380 aircraft into HKIA: Emirates, Korean Air, Qantas and THAI; the company handles an average of 150 Airbus A380 departures at HKIA every month.

# Inventory Technical Management +



# **New HAECO/Cathay Pacific joint venture**

In September, HAECO and Cathay Pacific Airways teamed up to form a Hong Kong-based joint venture, HAECO ITM Limited (HXITM), to provide Inventory Technical Management services to Cathay Pacific, Dragonair, as well as other airline customers.

HXITM commenced operations on 1 November, with services including provision and pool management of component inventories, management of component repairs/overhaul and engineering/reliability, supply chain management and 24/7 AOG support.

HXITM is a significant development for HAECO, capitalising on the global trend for airlines to outsource non-core, capital-intensive engineering activities such as component management, in order to provide improved economies of scale and greater efficiency.

# Component Services +



# **Taikoo Spirit acquires thrust reversers**

In October, Taikoo Spirit AeroSystems (Jinjiang) Composite Co. Ltd. (Taikoo Spirit) purchased eight CF6-80C2 (Boeing 747/767) thrust reversers. The thrust reversers will be comprehensively overhauled at Taikoo Spirit in accordance with the Component Maintenance Manual, and all applicable Service Bulletins will be accomplished. Upon completion, they will be used to acquire business primarily in the Asia Pacific region and to support the Boeing 747/767 aircraft in HAECO and TAECO's airline customers' fleets.

# Component Services +



# Taikoo Spirit gains Airbus A330 Trent 700 capability

During the last six months, Taikoo Spirit AeroSystems (Jinjiang) Composite Co. Ltd. (Taikoo Spirit) has introduced capability on nose cowl and thrust reverser on Trent 700 powered Airbus A330s.

Taikoo Spirit was granted approval on the Trent 700 nose cowl by Bombardier, which is supplying all tooling and rotables for work

carried out by the company. To date, 18 units have been overhauled. The turnaround time has also been reduced to 28 days after the initial learning curve. All units are released with CAAC, FAA and EASA approval. This programme aims to service Trent 700 powered Airbus A330 aircraft from around the region.

# Technical Training +



# TAECO's EASA Part-147 Training Programme

On 27 October, a graduation ceremony was held for 10 students from TAECO's EASA Part-147 Approved Basic Training Programme (Category B1.1). TAECO Manufacturing and Training Director, Fu Baoxin and General Manager Training, Henry Chen hosted the ceremony, which was also attended by graduates' family members and other students currently in training.

The graduates – nine from Malaysia and one from Sri Lanka – have completed an 18-month programme that included 2,513 hours on theoretical and practical modules in the classroom, workshop and hangar. They have now acquired the necessary skill sets and experience to become certified Part-66 maintenance personnel.

The next class of students will graduate in February and TAECO plans to organise two Category B1.1 classes and one B2 class during the course of 2013.

# Technical Training +



# **HAESL** committed to workplace safety

"Safety First" has always been a core value at HAESL, the HAECO Group's joint venture with Rolls-Royce. In addition to adhering strictly to the Hong Kong Labour Department's Occupational Health & Safety requirements in assessing manual handling risks in the workplace, the company actively goes beyond the minimum by preparing its staff to meet new challenges.

Recently, 30 HAESL staff participated in a rigorous Manual Handling training programme facilitated by the Occupational Safety and Health Council (OSHC). The two-day programme included practical training, a written examination and the completion of three assignments. Each staff member had to select three representative Manual Handling

operations, make a preliminary and further assessment of risks involved, design methods and procedures to mitigate such risks, and point out the inherent costs and benefits of the operation.

Upon successfully completing the programme, the 30 participating staff were presented with an OSHC Certificate of Competence in Manual Handling by HAESL's Director & General Manager, Richard Kendall.

HAESL believes that a proactive approach to workplace safety is vital for the well-being of staff and also helps improve service delivery by minimising Lost Time Injuries.







# **HAECO** and **TAECO** hosted IATP Conference

HAECO and TAECO jointly hosted the 106th International Airlines Technical Pool (IATP) conference in mid-October. More than 450 delegates representing 109 airlines and 33 MRO/OEM companies gathered in Xiamen to share views and best practices on resource pooling.

IATP Chairman, Mr. Giorgio Pietra expressed IATP's sincere gratitude to HAECO and TAECO for hosting the event, which allows airlines and MROs to capitalise on sharing technical resources to generate economic savings, and to achieve on-time dispatch reliability and safe operation at line stations.

Conference participants also had the opportunity to visit TAECO and its associates' facilities in Xiamen and to learn more about the HAECO Group's one-stop-shop service offerings.





# **HAECO** congratulates graduates

On 28 November, HAECO held a graduation ceremony for 146 trainees who have successfully completed a variety of aircraft engineering training and development programmes, ranging from one to three years. Graduates' family members were also invited to ioin the ceremony and tour the company's facilities.

At the ceremony, HAECO's CEO, Augustus Tang congratulated the graduates and encouraged them to continue learning and pursue their goals to become qualified engineering professionals.

HAECO takes pride in being the only commercial organisation in Hong Kong that provides comprehensive training in aircraft maintenance, repair and overhaul. Every year, the company recruits around 300 school leavers from high schools, vocational training institutes and universities for aircraft engineering training.

Joining Mr. Tang to present the graduation certificates were quests, Mr. Stanley Lau, Deputy Chairman, Federation of Hong Kong Industries; Professor Alan Lau, Mechanical Engineering Department, Hong Kong Polytechnic University (PolyU): Dr Leung Hip-hung, Senior Assistant Executive Director. Vocational Training Council (VTC); Mr. Cheng Kai-ming, member of the Labour Advisory Board, and Mrs Anna Lai, Executive Director, Hong Kong Ideas Centre.

Also in attendance were VTC Assistant Executive Director. Dr Ng Chak-man; Project Manager Pro-Act (Apprenticeship), Office of the Director of Apprenticeship, Mr. Simon Tang and Ms Celia Wong from PolyU's Mechanical Engineering Department, F



# VIP visit to TAECO

On 6 September, TAECO welcomed Mr. Lu Yongxiang, Vice-Chairman of the National People's Congress of the People's Republic of China, who toured the company's facilities, accompanied by Mr. Zhang Jian, Vice-Chairman of the Standing Committee of the People's Congress of Fujian Province, and other senior government officials. They were warmly received by TAECO's CEO, Steve Chadwick and his senior management team.

Vice-Chairman Lu expressed great interest in TAECO's freighter conversion business – especially the core technologies and innovative materials involved – and in the company's sophisticated corporate jet cabin solutions. Acknowledging TAECO's technological achievements and contributions to Xiamen's economic development, Vice-Chairman Lu said the city's planned second airport in the Xiang'an district would open up tremendous business potential for the company and encouraged TAECO to leverage this opportunity to grow hand-in-hand with the city.  $m \cite{N}$ 





# **HAESL** receives training award

In June, HAESL was presented with the Distinguished Knowledge Transfer Partnership Award 2012 by the Hong Kong Polytechnic University (PolyU), in recognition of the company's collaboration in a number of industry projects since 2002.

The past decade has seen the HAESL-PolyU partnership taking on a multitude of innovative projects to help improve HAESL's production efficiency and throughput, facilitate capability development, and develop tailor-made professional training modules for new HAESL recruits, with a focus on the acquisition of practical skills.

The partnership will continue to uphold HAESL's commitment to the community in growing young talent, and will also greatly enhance future business potential.



# **HAESL** gains risk management accreditation

On 8 October, HAESL was presented with a Level Three Enterprise Risk Management Maturity certificate by Rolls-Royce for governance compliance and risk management. According to Rolls-Royce' five-level rating system for its joint venture companies, a Level Three recognition means the company has demonstrated business processes that go beyond simple compliance through the use of advanced methods and training.

HAESL is the first major Rolls-Royce affiliated facility to have achieved this standard in the Greater China and the Asia Pacific region. The certificate was presented by Rolls-Royce's Enterprise Risk Manager – Greater China, Mr. Alek Derejian (third from left) to HAESL's Director & General Manager, Richard Kendall (fourth from left).

HAESL's Product Safety Manager, Kevin Rookes has also been recognised as a Rolls-Royce accredited Risk Facilitator. ►



# TAECO CEO Steve Chadwick sets "Best in Class" priority

In his latest message to staff, TAECO's newly-appointed CEO, Steve Chadwick says one of the company's major priorities must be to focus on dealing with challenges from the changing MRO landscape. Airlines are gradually retiring their legacy fleets to embrace a new generation of aircraft that are more reliable and require less heavy maintenance work, while the latest technological advancements are leading towards heavy reliance on composite materials and more sophisticated cabin seating arrangements and electrical and in-flight entertainment systems.

Mr. Chadwick acknowledged that all of these developments are making the MRO's role more complex. The variety of new aircraft types and the wider work scopes involved also make facility management and input planning more challenging than ever before.



TAECO will respond to these challenges by being "Best in Class" to retain existing customers and attract new clients.

Mr. Chadwick defines "Best in Class" as:

- · Consistently delivering quality and defect-free aircraft.
- Reducing input turnaround times and increasing productivity.
- Being a reliable business partner: consistently meeting and often exceeding customers' expectations and making it easy for them to work with TAECO.

Mr. Chadwick said the TAECO team will continue to look at all aspects of the business and seek out opportunities to grow the company.



# Interview with Mr. Christopher Gibbs

Engineering Director, Cathay Pacific Airways



- Cathay Pacific has recently unveiled the new Regional Business Class product for roll-out in January 2013. As the first aircraft begins its retrofit at TAECO this month, what are the major engineering challenges?
- Ar. Christopher Gibbs
- Airlines worldwide are upgrading and modernising their cabin products to further enhance service offerings. From Cathay Pacific's experience in retrofitting its long-haul cabins, adding Premium Economy seats and now starting on the installation of its new Regional Business Class cabin, how do you see the role of HAECO and TAECO in these projects?
- A Mr. Christopher Gibbs



# Interview with Mr. Christopher Gibbs

Engineering Director, Cathay Pacific Airways



- HAECO and Cathay Pacific have recently formed a joint venture company, HAECO ITM Limited. What is the airline's view of this business model of pooling components?
- Mr. Christopher Gibbs
- Airlines around the world are going through a challenging period with high fuel prices. From the engineering perspective, have you any recommended initiatives or measures that can help alleviate the impact of high fuel prices?
- Ar. Christopher Gibbs



# **HAECO Group Capabilities**

AIRCRAFT TYPE	EASA		FAA		HKCAD / CAAC	
	AIRFRAME MAINTENANCE	LINE MAINTENANCE	AIRFRAME MAINTENANCE	LINE MAINTENANCE	AIRFRAME MAINTENANCE	LINE MAINTENANCE
A300 / A310		<b>+ +</b>	<b>+</b>	+		<b>+ +</b>
A319 / A320 / A321	<b>+++</b>	<b>† †</b>	<b>+++</b> +	<b>†</b>	<b>+++</b> +	<b>† † † †</b>
A330	<b>† †</b>	<b>† †</b>	<b>†</b>	<b>+ +</b>	<b>† †</b>	<b>† †</b>
A340	<b>† †</b>	<b>† †</b>			<b>† †</b>	<b>† †</b>
A380						<b>+</b>
B737	<b>+ +</b>	<u>+</u>	<b>+++</b>	<b>† †</b>	<b>† †</b>	<b>+++</b> +
B737NG	<b>+</b>		<b>+++</b>	<b>† †</b>	<b>† †</b>	<b>† † †</b>
B747-200 / 300	<b>† †</b>	<b>† †</b>	<b>+ +</b>	<b>† †</b>	<b>+ +</b>	<b>† †</b>
B747-400	<b>† †</b>	<b>+</b> +	<b>+ +</b>	<b>† †</b>	<b>† †</b>	<b>† †</b>
B747-8		<b>+ +</b>	<b>±</b>	<b>†</b>	<b>+</b>	<b>†</b>
B757	<b>† †</b>	<b>† †</b>	<b>†</b>	<b>†</b>	<b>+ +</b>	<b>†</b>
B767	<b>+ +</b>	<b>† †</b>	<b>+</b> +	<b>† †</b>	<b>+ +</b>	<b>†</b>
B777	<b>+</b> +	<b>† †</b>	<b>†</b>	<b>† †</b>	<b>+ +</b>	<b>† †</b>
MD11	<b>+</b>	<b>† †</b>	<b>†</b>	<b>† †</b>	<b>†</b>	<b>†</b>
CL-600	<b>+</b>				<b>+</b>	<u>†</u> †
CL604-605					+	<u></u>
SAAB340B					+	Ť
BD-700-1A10					+	+
G450						+

Capabilities of the HAECO Group include but not limited to major aircraft types as listed above.

★ HAECO Hong Kong Aircraft Engineering Co. Ltd. TAECO
Taikoo (Xiamen) Aircraft
Engineering Co. Ltd.

★ 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, Bermuda DCA, Canada TC, Fiji Islands CAAF, India DGCA, Indonesia DGCA, Israel CAAI, Japan JCAB, Jordan CARC, Kenya CAA, Korea MLTM, Macao SAR JMM, Malaysia DCA, Mongolia MCAA, Nepal CAA, Pakistan CAA, Papua New Guinea CAA, People's Republic of China JMM, Philippines CAAP, Qatar CAA, Republic of China CCAA, Saudi Arabia SACAA, Singapore CAAS, South Africa SACAA, Sri Lanka CAA, Thailand DCA, United Arab Emirates GCAA. Vietnam CAAV.



### 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
- A320 / 330

### Composite Repair / Overhaul

- A330 Trent 700 T/R & N/C
- A320 V2500 A5 T/R, F/C & N/C
- B737NG CFM56-7 T/R
- B777 Trent 800, GE90 90/94/110/115, PW4000 T/R
- B767 / 747 CF6-80C2, PW4000 T/R
- Gulfstream BRJ725 T/R, F/C & N/C

# Wheels & Carbon Brakes Repair/Overhaul

- Boeing / Airbus / CRJ / EMB / MD

### Tyre Retreading Services

- B737C / 737NG / 747 / 757 / 767
- CRJ 200
- Bombardier -8 300/400
- Dornier 328
- Embraer 145

### Aircraft Parts Production & Manufacturing Approved under:

- HKAR-21 POA
- Boeing BQMS
- BVQI (AS9100-Rev C)
- 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
- HKCAD Aircraft Maintenance Basic License Examination Site
- CAAC Aircraft Maintenance Basic License Examination Site
- EASA Aircraft Maintenance Basic License Examination Site

### 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

