Group Services

Airframe Maintenance

Cabin Reconfiguration

Cabin Completion Centre

Freighter Conversion

Inventory Technical Management

Component Services

Technical Training
Airframe Maintenance

First HMV4 for United Airlines

In August, HAECO completed its first Heavy Maintenance Visit 4 (HMV4) procedure on a Boeing 747-400 aircraft (N182UA) for United Airlines (UA). The aircraft underwent exterior stripping and repainting and a Global Communications Suite (GCS) was installed in conjunction with the HMV4 check. Throughout the procedure, the HAECO team worked closely with UA’s on-site representatives and various suppliers. On 7 August, N182UA was redelivered to UA after a successful test flight.

The completion of this HMV4 input marks another milestone in the long-standing partnership between UA and HAECO.
Airframe Maintenance

Airbus A330 CoE

In mid-July, Cathay Pacific Airways took delivery of the 1,000th A330 aircraft manufactured by Airbus. The aircraft B-LBB is the airline group’s 56th of this type making the combined Cathay Pacific and Dragonair A330 fleet the largest in the world.

HAECO carried out pre-service maintenance on this landmark aircraft before it joined the Cathay fleet. The HAECO Group has been providing engineering support for Cathay Pacific’s Airbus A330 aircraft since 1995, when the airline first introduced this aircraft type into its fleet.

Over the years, the HAECO Group has developed into a centre of excellence for the Airbus A330. To date, HAECO has completed 760 A330 hangar inputs, while Hong Kong Aero Engine Services Limited (HAESL) offers world-class repair and overhaul services on Trent 700 engines and Taikoo Spirit AeroSystems (Jinjiang) Composite Co. Ltd. supports A330 customers with Trent 700 nacelle and thrust reverser repair and overhaul capabilities. The Group’s service scope for the A330 covers airframe maintenance, line maintenance and ramp services, cabin reconfiguration and integration, inventory technical management, component services and engine overhaul for the aircraft type.
TAECO and ANA celebrates 200

On 10 June, Taikoo (Xiamen) Aircraft Engineering Co. Ltd. (TAECO) redelivered its 200th aircraft to All Nippon Airways (ANA), a ceremony was held to mark the occasion at TAECO’s hangars. The relationship between TAECO and ANA dates back 16 years to 1997, when ANA first entrusted TAECO with a Boeing 747 aircraft.

Over the years, TAECO has impressed the airline with its commitment to quality, safety and efficiency – laying a solid foundation for this long-term business relationship.
Airframe Maintenance

TAECO welcomes Condor

From 5 September, TAECO will perform cabin reconfiguration and heavy maintenance services on Condor Flugdienst GmbH’s (Condor) Boeing 767-300 aircraft. TAECO has entered into an agreement with the Frankfurt-based airline to provide these services for a total of 12 Boeing 767s from the Condor fleet.
New customer for STAECO

On 1 June, Taikoo (Shandong) Aircraft Engineering Co. Ltd. (STAECO) completed a 12-month maintenance check and engineering order on a Bombardier Challenger 850 aircraft for Macau-based operator Fortuna Jet. The STAECO team completed the scheduled maintenance tasks, as well as trimming the aircraft’s horizontal stabiliser, fixing an inoperative auxiliary fuel tank and rectifying various structural defects, within a week. STAECO staff and engineers demonstrated unparalleled teamwork to ensure the timely redelivery to the customer and effective communication with Bombardier ensured prompt approval from the aircraft manufacturer.

Fortuna Jet provides executive and private jet services between Macau, Hong Kong and Mainland China. Following on from the successful redelivery of STAECO’s first Fortuna Jet work package, Mr. Warren Chim, the airline’s Chief Operating Officer expressed his intention of entrusting Fortuna’s entire fleet of Bombardier and Gulfstream aircraft to the company for future engineering needs. This successful cooperation with Fortuna Jet marks STAECO’s official entry into the Macau and Hong Kong business jet maintenance market.
48th lease-return check

On 7 June, STAECO completed a lease-return check on a Boeing 737-NG for China United Airlines (CUA). This is the second input of this aircraft type from CUA and the 48th lease-return check performed to date by STAECO. The company’s extensive lease-return check experience, first-class workmanship and efficient turnaround time have not only earned STAECO the appreciation of its customers, but also laid a solid foundation for future business development.
Another first for STAECO

On 15 June, STAECO completed its first Boeing 737-400 flap performance improvement modification. The modification was performed for China Postal Airlines under a Supplementary Type Certificate (STC) supplied by AeroTech Services Inc. This procedure offers the benefits of improving the aircraft’s lift-to-drag ratio, thus effectively reducing fuel burn. The Boeing 737-400 flap modification adds further capability to the comprehensive range of services currently offered by STAECO.

New partnership

On 18 July, STAECO and Capital Jet Limited entered into a strategic partnership to offer Fixed Base Operator (FBO) maintenance services at Beijing Capital International Airport. Capital Jet is the only authorised FBO at the airport, providing an array of ground services to business and private jets. STAECO – a holder of Part 145 Certification from many countries and a CCAR-147 Training Centre operator – will support Capital Jet by providing technical expertise in scheduled checks and maintenance, modifications and engineering management, as well as parts supply, AOG support and type training.
UA programme completes

The redelivery of aircraft N77066 in July marked the completion by HAECO of a major cabin modification programme on 14 United Airlines’ (UA) Boeing 767-400 aircraft. Modifications included the installation of new BusinessFirst flat-bed seats and new in-flight entertainment systems.

During the course of the programme, HAECO worked closely with UA and its suppliers to ensure high-quality cabin products were delivered to the airline. The completion of the modifications marks a significant milestone in the long-term partnership between UA and HAECO.
**TAECO introduces new capability**

TAECO’s Airbus and Boeing-approved VIP Completion Centre has recently introduced an innovative new capability offering private and business jet customers exciting options in cabin decoration. Liquid printing is a new technology that enables patterns and designs to be applied to irregularly-shaped objects, opening up unprecedented opportunities for bespoke cabin projects.

The flexibility this sophisticated process offers has made possible the painting of any object that holds a base coat and can be safely submerged in water, thus allowing items such as table tops, TV frames, cabinets and side ledges to be decorated to the customer’s specifications. Very high quality finishes, such as faux veneer, can be applied using this method and it is rapidly gaining popularity amongst VIP and charter operators, as it easily passes stringent burn-test requirements.

TAECO’s VIP Completion Centre has also recently opened a new pull-test lab for structural static testing to verify the structural integrity of aircraft interior monuments and fulfil regulatory requirements such as FAR/CS 25.561. The facility has equipment capable of applying pulling and push forces of up to 50,000 Newtons (N). Up to four single-axial load measurements, four tri-axial load measurements and two deflection measurements can be recorded simultaneously during a single test, providing reaction and deformation data for analysis. The first structural static test on a cabin class divider was successfully performed in August, in the presence of the HKCAD.
Freighter Conversion

TAECO welcomes returning PTF customer

On 31 July, a Boeing 757-200 aircraft belonging to Air China Cargo was towed into TAECO’s hangar facility in Xiamen for a passenger-to-freighter conversion under a Precision Conversions STC.

State-owned operator, Air China Cargo, has been a loyal cargo conversion customer, with Boeing 747BCF projects completed by TAECO back in 2008. This is TAECO’s first freighter conversion for Air China Cargo on a Boeing 757 aircraft and more are expected to follow.
Inventory Technical Management

Smooth operations

Earlier this year, Cebu Pacific Air appointed HAECO as Inventory Technical Management service provider for its fleet of up to eight Airbus A330-300 aircraft. Services include detailed planning of regular comprehensive maintenance checks, pool management of components, component repair and overhaul management, as well as 24/7 AOG support.

In June, the airline took delivery of its first Airbus A330 and the second in early September. Cebu Pacific currently operates the aircraft on medium-haul regional routes, and will launch its first long-haul daily service to Dubai in October.

“We are pleased with the services HAECO provides. With HAECO’s strong technical capabilities and the benefits of sharing of parts inventory, our operations remain highly cost-efficient. This allows us to continue offering CEB’s services and trademark low fares to all our passengers,” said Alex Reyes, General Manager, Long Haul Division of Cebu Pacific.
Taikoo Spirit builds capabilities

In June, Taikoo Spirit AeroSystems (Jinjiang) Composite Co. Ltd. (Taikoo Spirit) performed on-site repair work on an Airbus A330 T700 thrust reverser for Air China/AMECO.

Air China requested Taikoo Spirit’s assistance after a damaged pre-cooler duct was found in the thrust reverser. Steven Yang, an experienced licensed engineer with Taikoo Spirit, was sent to Beijing to carry out inspection and maintenance work and on 20 June, the aircraft was released with certification obtained from the Civil Aviation Administration of China (CAAC) and Federal Aviation Administration (FAA).

In response to an increasing demand for field services within Mainland China and around the Asia Pacific region as a whole, Taikoo Spirit is increasing the capabilities of its field services team. A Boeing 777 T800 inner wall replacement programme (SB) will commence later this year, with a dedicated Taikoo Spirit field services team formed to execute repair work at customers’ premises.
VIP visit to Taikoo Spirit

On 10 July, Mr. Liu Wen-ru, Mayor of Jinjiang, visited Taikoo Spirit, along with other companies in the Quanzhou Export Processing Zone (QEPZ). Accompanied by Deputy Mayor, Mr. Xu Hong-cheng and QEPZ Committee General Manager, Mr. Xue Zong-yan, Mayor Liu learned about the latest developments and trends and the visit strengthened communication and understanding between government and the companies operating within the zone.

Mayor Liu was impressed with Taikoo Spirit’s ongoing development and enhancements to its capabilities and its attention to staff welfare.
Technical Training

New training programme

With the aim of creating a pool of skilled maintenance personnel with solid technical expertise, HAECO is launching a new Aircraft Maintenance Mechanics Trainee (AMMT) programme in September.

The programme aims to provide staff with opportunities to pursue higher academic qualifications while still working – enabling them to advance their careers in the aircraft engineering industry without loss of earnings. The scheme will also help meet HAECO’s future needs for qualified maintenance personnel.

As the only organisation in Hong Kong providing comprehensive training in the aircraft engineering and maintenance field, HAECO has contributed hugely to the development of Hong Kong’s aviation industry over the decades, by creating a large, highly-skilled and professional workforce. More than 10,000 aircraft mechanics and over 700 aircraft maintenance engineers have completed their technical training at HAECO’s facility in Hong Kong.
TAECO celebrates two decades of growth

On 27 June, TAECO celebrated its 20th anniversary. Since its establishment, the company has performed over 1,700 heavy checks. The occasion also marked TAECO’s 1,729th redelivery of a Boeing 747-400 aircraft (HOR) to Cathay Pacific Airways.

The ceremony was attended by local and overseas customers. Addressing the guests, TAECO’s Chairman, Augustus Tang, thanked government, customers, shareholders as well as TAECO’s staff members for their continued support and trust.

As a memento of the successful redelivery of B-HOR, Steve Chadwick, TAECO’s Director & Chief Executive Officer, presented Cathay Pacific’s Engineering Director, Christopher Gibbs, with a carved representation of the aircraft.
2012 SD Report published

HAECO Group has published its annual Sustainable Development (SD) Report for 2012. The report covers the sustainability performance of HAECO, TAECO, TEXL and HAESL.

As a leading aircraft maintenance, repair and overhaul services provider, HAECO Group is fully committed to its longstanding objectives of creating sustainable growth in shareholder value, while contributing to the community. The SD Report provides details of the Group’s sustainable development in five major areas, including environment, health and safety, employee, business partners and the community. To help protect the environment, in 2012, the Group reached a milestone when it completed its 50th winglet modification on a Boeing 767 aircraft that help aircraft save fuel, and recycled over 400,000 kg of material, including food waste, paper, plastics and metals. In addition to recording HAECO’s achievements over the past year, the SD Report also outlines the Group’s plans for 2013.

The SD report is available online and can be found at: http://www.haeco.com/about_haeco/development.html
HAECO recently donated parts and equipment to the Crossroads Foundation to build a staging platform to facilitate the loading into containers of goods destined for charitable distribution overseas.

The Crossroads Foundation contacted HAECO in November last year, when they were in the process of designing a set of steps and a staging platform to assist with container loading. HAECO arranged for the Crossroads maintenance team to visit its facility to inspect a range of equipment used to access aircraft of all shapes and sizes. During the visit, the team was offered first refusal on various pieces of old equipment that were due for replacement, including stands, sliding platforms and hydraulic platforms.

In February this year, the Crossroads maintenance team collected the selected parts and began work on making the structure they needed. The original access platforms were cut, extended, welded, load-tested and finally painted (thoughtfully, in HAECO colours!) before going into use in August. The new platform makes the loading of containers significantly easier, quicker and safer.

Crossroads Foundation is a Hong Kong-based, non-profit organisation serving global charitable needs.
Mangrove exploration

TAECO has partnered the Centre for Ocean Sciences Education Excellence China (COSEE China) in various CSR initiatives. On 27 and 28 July, COSEE China organised a mangrove exploration summer camp in Xiamen and seven youngsters whose parents are TAECO staff members were selected to join the programme.

During the two-day camp, the children visited a mangrove wetland to learn about its current status and the major threats to mangroves. They also assisted in putting measures in place to help develop and protect the wetland resource.
### HAECO Group Capabilities

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<tr>
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- **Maintenance of aircraft registered in PRC, Macau SAR and Hong Kong SAR respectively is provisioned under the Joint Maintenance Management (JMM) cooperation arrangement.**

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

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**HAECO**
Hong Kong Aircraft Engineering Co. Ltd.

**TAECO**
Taikoo (Xiamen) Aircraft Engineering Co. Ltd.

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

**SMECO**
Sichuan Aircraft Maintenance Engineering 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 JCAAB, 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