Group Services

- Airframe Maintenance
- Line Maintenance
- Inventory Technical Management
- Component Services
- Engine Overhaul
- Technical Training
United Airlines / HAECO celebrate 10 years

On 11 April, HAECO hosted an event to celebrate a decade of partnership with United Airlines (UA).

Over the past 10 years, HAECO has performed 290 hangar inputs for UA, including C Checks and various modification programmes on Boeing 737NGs, 757s, 767s and 777 aircraft types for the airline.

HAECO has been working hand-in-hand with UA as the airline has evolved through fleet modernisation, enhanced aircraft efficiency and the launch of signature cabin products and service offerings as a significant player in the global aviation industry.

HAECO and UA have developed and maintain strong rapports throughout the organisations. With this solid foundation, there is no doubt that United Airlines and HAECO will be celebrating many more anniversaries in the years to come.
Fiji Airways unveils new look

Fiji’s international carrier, Air Pacific, is changing its name to Fiji Airways. In the lead up to the corporate re-branding, the airline hosted an event in March to celebrate the arrival of its first Airbus A330-200 aircraft painted in the new Fiji Airways livery.

Officiating at the ceremony were the President of Fiji, His Excellency, Ratu Epeli Nailatikau (2nd from left), HKSAR Secretary for Transport and Housing, Mr. Anthony Cheung (left), and the airline’s then CEO and Managing Director, Mr. Dave Pflieger (3rd from left).

HAECO supports Fiji Airways in providing maintenance checks, cabin upgrades and repainting of new livery on its Boeing 737 aircraft.
Airframe Maintenance

Taikoo Sichuan off to a flying start

Taikoo Sichuan Aircraft Engineering Services Co. Ltd., which attained FAA certification in August last year, completed its very first B-6163 aircraft 4C + 6Y airframe maintenance programme for Chengdu Airlines in November. The company has since set a new record with a 55-day lease return check on two Sichuan Airlines’ Airbus A321 aircraft, in accordance with FAA standards.

Because of the late arrival of the aircraft at its facility in February this year, Taikoo Sichuan was faced with a shortened lead time to the agreed end-of-April redelivery date. A task force was formed to facilitate efficient progression of the maintenance programme, which included cabin refurbishment, defects rectification and the restoration of the cargo loading system. The successful test flights at 55 days set a new record for lease return checks for Airbus A321 aircraft.

Both aircraft were redelivered to Sichuan Airlines on 22 April, seven days ahead of schedule. The airline was so impressed with Taikoo Sichuan’s efficiency and quality of work that it has commissioned the company to carry out five additional lease return checks in 2014.
STAECO completes 100 inputs for ANA

On 19 April, Taikoo (Shandong) Aircraft Engineering Co. Ltd. (STAECO) celebrated the completion of its 100th C Check for All Nippon Airways (ANA). This milestone also marked seven years of longstanding business partnership with STAECO, with the delivery of its first Boeing 737 to the Jinan facility in 2006.

ANA Director of Maintenance Planning & Control, Mr. Takahashi Masahisa (4th from right) and STAECO General Manager Huang En-fang (4th from left) exchanged mementos at the ceremony, which also featured a drum dance by STAECO staff.
STAECO has been named as its 26th approved Examination Station by the CAAC’s Civil Aircraft Maintenance Personnel License Examination Administration (“the Administration”).

On 6 March, a ceremony was held to mark the occasion at the Jinan facility. Officiating at the event were Administration Chief Mr. Ren Ren-liang (2nd from right), Chief of CAAC Shandong Office Airworthiness Division Mr. Shao Hai-feng (left), STAECO General Manager Huang En-fang (2nd from left), and STAECO Training Centre Countable Manager Liu Jing (right).

The new Jinan Examination Station is licensed to conduct all theory, oral and practical examinations required under CCAR66 regulations and the approval is a testament to STAECO’s training capabilities in developing aircraft engineering and maintenance professionals.
Airframe Maintenance

Air Astana engages TAECO

At the beginning to the year, Air Astana appointed Taikoo (Xiamen) Aircraft Engineering Co. Ltd. (TAECO) as heavy maintenance (C Check) service provider for its five Boeing 757 and three Airbus A320 aircraft. By the end of May, TAECO had completed work on three of the airline’s Boeing 757 and two of its Airbus A320 aircraft.

Air Astana’s engineering staff expressed that they are very appreciative of the TAECO team’s technical expertise, resourcefulness, and capabilities in solving logistical issues.
TAECO celebrates JAL milestone

On 14 May, TAECO held a ceremony to commemorate its 150th redelivery to Japan Airlines (JAL) since 1997 and the successful completion of its first winglet modification for the airline. To date, TAECO has completed a total of 152 aircraft maintenance inputs for JAL.

JAL VP & Deputy General Manager, Engineering & Maintenance Division, Mr. Keiji Suisha said at the ceremony: “I am impressed with your high quality and high performance.”
New TAECO customer

On 29 May, TAECO completed its first Boeing 757 C Check for MEGA Maldives Airlines. TAECO received high praise from the airline for its professional skills, flexibility and efficiency.

TAECO will soon be performing C Checks on two Boeing 767 aircraft for the airline.
HAECO welcomes Air Seychelles

On 25 March, HAECO welcomed Air Seychelles’ inaugural passenger flight to Hong Kong. As part of a global network expansion, Air Seychelles now operates three flights a week to Hong Kong, where HAECO provides full line maintenance support for the airline’s fleet of Airbus A330-200 passenger aircraft, including aircraft certification and release, technical assistance, ramp equipment and cabin services. HAECO is also longstanding MRO service provider to Air Seychelles’s strategic shareholder, Ethiad Airways.
EVA accolade

In March 2013, Taiwan’s EVA Air presented an “Excellent Performance Award 2012” to the HAECO line maintenance team, in recognition of the quality services provided and high safety standards maintained by HAECO. At a special award presentation dinner on 15 March, EVA Air General Manager Mr. James Chiou (right) and Assistant Station Manager Ms. Katie Lai (left) presented the Award to HAECO’s W.M. Chung, Assistant General Manager – Line Maintenance (Ramp Operations).
Air China award

STAECO has been named as one of eight Gold Line Maintenance Agencies in 2012 by Air China. The award is a significant honour for STAECO, which stood out in the airline’s evaluation of some 100 LM agencies for its provision of professional and quality services, including on-time performance, defects rectification and flight protection.

At the award presentation ceremony on 25 March, Air China highlighted the STAECO LM team’s working performance over the past three years – notably the achievement of zero anomalies in 2012.
Inventory Technical Management

HXITM first anniversary

On 5 June, HAECO ITM Ltd. (HXITM) held a ceremony to mark the first anniversary of the relocation of the Cathay Pacific’s IOPs team into the HXITM office. It was a great day to remember and management took the opportunity to extend their thanks to all members of the HXITM team.

The move was smoothly carried out with almost ‘zero’ interruptions during the transition. HXITM Executive General Manager Richard Reed, said: “The team is now totally integrated. With contributions from all staff members over the year, we have seen gradual improvements in various aspects of our operations, and the combining of our talents under one roof has generated tremendous synergy.”

HXITM will continue to enhance the provision of one-stop-shop operations for its joint venture partner and valued customer, Cathay Pacific, and world-class inventory management services for other airline customers.
HAECO provides SB solution

In late May this year, GE Aviation issued a Service Bulletin (SB) for a modification to the pre-cooler duct of the GE9x-2B right hand thrust reverser. The SB incorporates design improvements around the pre-cooler duct wear strip, flange and fire blanket clip assemblies.

GE Middle River Aircraft Systems (MRAS) engaged HAECO to perform the SB modification on a Cathay Pacific Boeing 747-8F in conjunction with a C Check, thereby resulting in minimal aircraft down time.

MRAS positioned two sets of specialist tooling (one wing, two engines, one tool), modification kits as well as two spare thrust reversers in Hong Kong should unexpected findings occur upon thrust reverser removal. HAECO Component & Avionics Overhaul department (CAO) appointed a dedicated nacelle team and worked with HAECO Base Maintenance department to complete the SB modification.

The task involved the removal of each of the RH thrust reversers from the aircraft, modification of the old pre-cooler duct to the new configuration, then reinstallation and testing of the thrust reversers. HAECO’s CAO team worked a three-shift pattern so that the SB modification could be successfully carried out across all four engines within the timeframe of the aircraft’s C Check.

It is expected that more airlines operating Boeing 747-8F aircraft will utilise down time to perform thrust reverser modifications in conjunction with heavy checks in Hong Kong, in compliance with the SB.
HAESL supports PolyU

On 10 April, HAESL welcomed a delegation of six professors from the Hong Kong Polytechnic University (PolyU), led by the Dean of the Faculty of Engineering. The visit was part of the university’s efforts to understand MRO needs and industry trends, with a view to planning the curriculum of a two-year top-up aero-related engineering degree programme commencing in 2014.

The delegation were given a tour of HAESL’s facilities and also briefed on the company’s views on growing new engineering talent in Hong Kong. HAESL will continue to work closely with the university on developing this programme.
Technical Training

**STAECO trains Eastar Jet engineers**

In February, STAECO hosted a 10-day training course on Boeing aircraft structure for two engineers from Eastar Jet of Korea. The training programme covered the use of Myboeingfleet.com, damage report compilation, Boeing engineering approvals, general repair procedures for composite structures, and major repairs.

The two engineers said they found the training course tremendously useful and supportive. The provision of structure training to third parties by STAECO’s technical engineering team is becoming a new revenue stream for the company.

Implementation of the course marks a new high for STAECO’s technical training capabilities, following on from its collaboration with Boeing in 2011 to organise the BCS Effective & Efficient Communication Workshop, which earned the company a provincial Level-3 medal for corporate training and staff education activities.

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**HAECO and HAESL recognised as Manpower Developers**

Both HAECO and HAESL have been named Manpower Developers (MD) by the Hong Kong Employees Retraining Board (ERB) in recognition of their training and development efforts.

To qualify for the MD award, HAECO and HAESL went through an audit process, in which the effectiveness of their strategies and practices in manpower training and development were reviewed and evaluated in accordance with a set of objectives and stringent assessment criteria established by an independent technical consultant.

The HAECO Group is committed to developing an industry-leading workforce in Hong Kong and will continue to invest in the development of home-grown aircraft engineering and maintenance professionals.
TAECO showcases cabin concepts

From 16-18 April, TAECO’s VIP cabin completion centre showcased its latest conceptual designs for Boeing and Airbus narrow body interiors at the Asian Business Aviation Conference and Exhibition (ABACE) in Shanghai.

The TAECO delegation attended the trade event to learn about the latest industry trends and also increase TAECO’s exposure in the market place.

ABACE was a great success this year, with a record 7,700 visitors over the three days. TAECO received a lot of positive feedback from visitors and potential customers, who were impressed by its elegant, contemporary cabin designs.

Asia remains the fastest growing market for business jets and though it still has a long way to go before it catches up with mature markets such as North America, OEMs are focusing a lot of resources in the area as they seek to capture their share of the growth.

TAECO houses the region’s only completion centre capable of designing, building and installing VIP interiors in Airbus and Boeing aircraft. Shown here are the latest concepts from TAECO’s in-house conceptual design team.
Pedal hard for a worthy cause

On 4 May, HAECO took part in the 24-Hour Pedal Kart Grand Prix event, organised by the Association of Round Tables in Hong Kong. HAECO was joined by fellow Swire group companies, HAESL and Cathay Pacific and other teams to raise funds for charities across Asia. The HAECO karts captured three trophies, i.e. number of laps in the “Mixed Engine” and “Formula Fun” categories and the “Most Reliable Kart” on the track.

HAECO also set a new company record by raising HK$106,000 for the needy, many thanks to the generous contribution from staff and business partners.
STAECO goes green

On 4 May, STAECO volunteers launched an environmental awareness campaign in Honglou Square, Jinan, as part of the company’s CSR initiatives.

The volunteers distributed environmentally friendly bags printed with the STAECO logo to passers-by, shared their knowledge of green living, and encouraged Jinan citizens to sign on a banner, pledging their commitment to a greener lifestyle. To put their belief into action, the volunteers also collected garbage and cleaned up the area.
TAECO supports Earth Hour

TAECO has been a strong supporter of the global Earth Hour campaign organised by the World Wide Fund for Nature which encourages households and businesses to turn off non-essential lights for one hour every year to raise awareness about the need to take action on climate change.

On 22 March, a day before the Earth Hour event, TAECO set up a signature wall and appealed to employees to support Earth Hour. About 1,000 staff signed their name on the wall and each of them received a small candle for use at the Earth Hour.

TAECO encourages its employees to save energy at work and at home, and aims to encourage greater awareness of climate change issues by promoting the annual event.
Taikoo Spirit implements capability strategy and OEM engagement

Taikoo Spirit AeroSystems (Jinjiang) Composite, the HAECO Group’s joint venture with Spirit AeroSystems, has significantly enhanced its component repair and maintenance capabilities. William Davies, Director and General Manager of Taikoo Spirit says that over the last two years the company has expanded its nacelle offerings from predominately CFM56-7s and Trent 800 thrust reversers (fitted respectively on the Boeing 737NG and Boeing 777) and now also has capacity to service Airbus A320 V2500 and CFM56-5B nacelles, A330 T700 nacelles, as well as all engine types of the Boeing 777 aircraft - including GE90, PW and T800 nacelles.

With active engagement with Bombardier and Aircelle, the business now offers airline customers a blend of OEM design data and engineering capability with MRO expertise at fulfilment. “This has particularly lent itself to offerings on the Airbus A330 Trent 700 nose cowl and A320 V2500 nacelle with Bombardier, and the A330 Trent 700 and A340 CFM56-5C4 thrust reversers with Aircelle.”
Mr. Davies sees the business adding repair capability over flight controls and radomes as further capabilities to complement the nacelle offerings, as well as expanding its engineering side: “We need to be able to offer out-of-manual repairs and have these validated under the Design Engineering Representative (DER) approval system, to be able to push the ‘repair’ versus ‘replace’ philosophy. This will drive competitive pricing for our customers and I hope lead to market share and margin improvements. On top of this, having a pool of rotatable assets is essential to be able to ‘swap’ with customer units. The investment is large and plays into this business being, by default, long-term.”

Mr. Davies acknowledges that the nacelle composite overhaul sector is not an easy one to inhabit, especially as the nacelle falls under ‘on-condition’ maintenance, rather than scheduled maintenance criteria based on cycles or hours. “With the growing might of the OEMs in the aftermarket arena, and especially on the newer aircraft platforms, ever-more expensive investment required in rotables and the fast commoditisation of legacy products, the future will be challenging, but Taikoo Spirit is positioning itself well to handle these challenges going forward”. ➤
## HAECO Group Capabilities

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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.

**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