

# Aviation and Aerospace M&A Quarterly

Q2 2016

**ICF International (formerly ICF SH&E) is pleased to present the 12th edition of *Aircraft, Airlines, Aerospace & Airport M&A Quarterly*, published in association with Mergermarket. The publication highlights activity and trends in aircraft, airlines, aerospace, airport and tourism M&A in Q2 2016**

The second quarter of 2016 saw continued private equity interest in the European airport sector, with the US\$228m acquisition of Belgian ground service equipment leasing and services provider TCR International by 3i Infrastructure and venture capital firm Deutsche Asset & Wealth Management. ICF provided commercial and business planning advice to the winning consortium.

Chinese investors also had an active second quarter, both on the airports and airlines front. Tirana International

Airport was snapped up by Chinese firms as part of China's One Belt, One Road strategy, which aims to create logistical and trade hubs inside the country's key economic partners across Eurasia.

Keen Dynamics Limited – a joint venture consisting of Hong Kong-based financial services firm China Everbright Limited and Friedmann Pacific Asset Management Limited – agreed to acquire Albania's Tirana International Airport from Germany's DEG.

Ranking	Target Company	Bidder Company	Deal Value US\$	Sector
1	Airbus	Dassault Aviation	US\$2.7bn	Aerospace
2	Data Device Corporation	TransDigm	US\$1.0bn	Aerospace
3	AirAsia	Tune Live	US\$263m	Airline
4	TCR International	3i Infrastructure and Deutsche Asset & Wealth Management	US\$228m	Airport

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On the airline side, Virgin Australia received two new Chinese shareholders in the form of HNA Group and Nanshan Group. HNA took a 13% stake for US\$114m while Nanshan spent US\$198m on a 20% shareholding in the airline.

The biggest deal of the quarter occurred in the aerospace sector and involved Airbus Group, with the European airframer continuing to follow its strategy of selling off non-core operations. The group divested its remaining stake in French business jet manufacturer Dassault Aviation for an expected US\$2.7bn.

### Private Equity Trends

Private equity firms continued to be active in the aerospace and airport sectors in the second quarter, mirroring previous quarters.

Notable private equity deals this quarter include Behrman Capital's sale of aerospace parts manufacturer ILC Industries to TransDigm for US\$1bn, and Chequers Capital and Florac SAS' sale of ground service equipment leasing firm TCR International to 3i Infrastructure and Deutsche Asset & Wealth Management for US\$228m.

The quarter also saw a private equity exit from the airline sector when Growth Capital Partners sold aviation data and records management software provider FLYdocs to Germany's Lufthansa Technik. GCP had originally invested in FLYdocs in April 2015 and says the recent stake sale generated a "strong return" for its investors.

### Regional Trends

1. On the buy side **North American** firms were successful in their acquisition of eight firms, and **European** buyers were successful in acquiring 13 firms.
2. **European** firms were the top targets, with 18 companies acquired.
3. The majority of deals were intra-regional and focused in **North America** and **Europe**, respectively. Inter-regional deals mostly consisted of **North American** and **Chinese** buyers of **European** firms.

**"The biggest deal of the quarter occurred in the aerospace sector and involved Airbus Group, with the European airframer continuing to follow its strategy of selling off non-core operations."**

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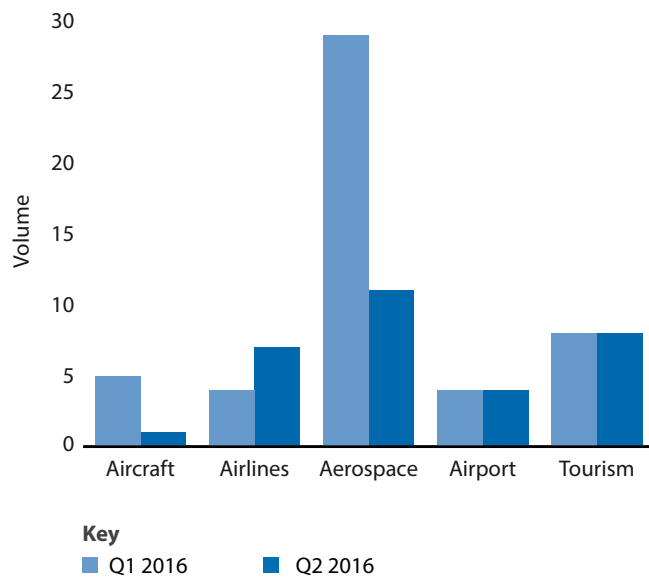
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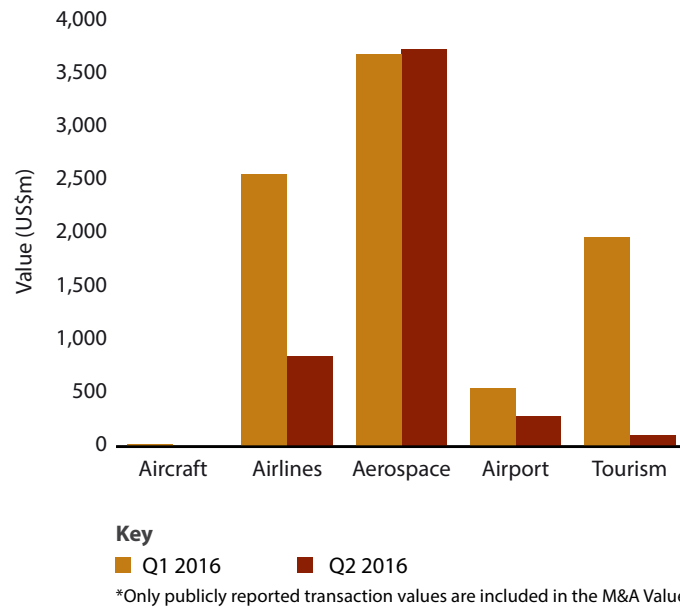
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### M&A Volume



### M&A Value



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# Aircraft

## NAC Continues Push into Jet Leasing Market

**Danish aircraft leasing company Nordic Aviation Capital (NAC) in April acquired its second jet lessor in the space of two quarters, pushing ahead with its strategy of diversifying its portfolio to include jet aircraft as well as turboprops.**

NAC acquired Irish Embraer E-Jet leasing company Aldus Aviation from its management team for an undisclosed sum, hot on the heels of its Q1 purchase of regional jet lessor Jetscape Aviation Group. The acquisitions follow NAC's Q3 2015 change of ownership, when Swedish private equity group EQT acquired a majority stake in the company for US\$3.3bn.

NAC is the world's largest turboprop leasing company, but its two recent acquisitions of E-Jet lessors demonstrate its strategy of diversifying into the jet market. Aldus Aviation has a fleet of 30 E-Jets, comprising five E-170s, four E-175s, 15 E-190s and six E-195s. Post-acquisition, NAC will have a combined fleet of 294 aircraft, 48 managed aircraft and an additional 74 – 20 E-Jets and 54 ATR turboprops – on order.

Shannon-based Aldus Aviation, which was founded in 2008, will eventually operate under the NAC brand.

The aircraft leasing sector has been a hive of activity over the last several quarters. However, the market appears to have calmed down in Q2, with the NAC transaction being the most notable in the three months ending June 30.

### Key Takeaway

1. Nordic Aviation Capital continues its jet aircraft leasing spree with acquisition of Irish Embraer E-Jet lessor Aldus Aviation from its management team

### Q2 2016 Highlighted Aircraft Transaction

Announced Date	Target Company	Bidder Company	Deal Value US\$(m)
04/15/2016	Aldus Aviation Limited	Nordic Aviation Capital A/S	Not disclosed

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# Airlines

## Chinese Investors Dominate Airline Transactions

**Continuing a trend that has characterized previous quarters, Chinese investor interest in airlines based in different areas of the world remained strong in the second quarter.**

HNA Group, the owner of Chinese airline Hainan and a shareholder in a number of other carriers, acquired a 13% stake in Virgin Australia for US\$114m. Another Chinese firm, Nanshan Group, acquired a further 20% stake in the Australian carrier for US\$198m.

For HNA Group, the stake acquisition follows on from its Q4 2015 purchase of a 23.5% stake in Brazilian airline Azul for US\$450m. Both the Azul and the Virgin Australia transactions emphasize HNA's increasing activity in the aviation sector, particularly outside its home country. The Chinese conglomerate announced in July 2015 that it had acquired European ground handling service provider Swissport for US\$2.8bn.

On announcing the Virgin Australia deal, HNA Group also confirmed agreements with the Australian airline to include codeshares, lounge access and loyalty programs, along with a planned partnership for promotional material. HNA also noted its intention to increase its share in Virgin Australia to 19.9%.

The other Chinese investor, Nanshan Group, has interests in metals and property, and also owns Chinese domestic carrier Qingdao Airlines. Unlike HNA Group, Nanshan has not yet announced any strategic partnerships with Virgin Australia.

Chinese investors were also active in the European airline sector in Q2, with CEFC China Energy Company acquiring a 39.92% stake in Czech airline company Travel Service from UNIMEX Group for an undisclosed sum. CEFC already owned a 10% stake in Travel Service, which it acquired in September 2015, so the latest transaction boosts its ownership to just shy of half the company.

Travel Service operates scheduled commercial flights under the SmartWings brand, as well as charter flights to predominantly leisure destinations and business jet services. It also leases aircraft to other airlines on an aircraft, crew, maintenance and insurance (ACMI) basis. The SmartWings fleet is expanding with 19 Boeing 737 MAX 8 aircraft on order, scheduled for delivery between 2018 and 2020, according to CAPA Fleets, as of June 2016.

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“HNA Group, the owner of Chinese airline Hainan and a shareholder in a number of other carriers, acquired a 13% stake in Virgin Australia for US\$114m. Another Chinese firm, Nanshan Group, acquired a further 20% stake in the Australian carrier for US\$198m.”

CEFC has also recently acquired stakes in a number of other Czech companies, including beverage producers, media firms and sports teams. The energy giant has selected Prague as its European headquarters as it continues to implement China’s One Belt, One Road initiative.

**AirAsia Founders Demonstrate Commitment to Airline**

The chairman and chief executive of Malaysian low-cost carrier AirAsia increased their shares in the airline in the second quarter, providing it with a capital injection to help pay down its debts and demonstrating their commitment to the company.

Tune Live, a Malaysian holding company with interests in the travel and leisure markets that is jointly owned by AirAsia chief executive Tony Fernandes and the airline’s chairman, Kamarudin Meranun, acquired an additional 16.7% stake in AirAsia for US\$263m.

The airline has indicated that 34% of the sale proceeds will be used to pre-pay unsecured loans and unsecured revolving credit. A further 27% is to be used for the pre-payment of delivery of aircraft engine parts and spares, and another 10% will be allocated to development and construction costs of AirAsia’s headquarters. Remaining funds will be apportioned to general corporate costs and working capital requirements.

The transaction raises Fernandes’ and Meranun’s stakes in the company to 32.4%. AirAsia, which has subsidiaries in Thailand, Indonesia, the Philippines, India and Japan, more than doubled its operating profit in the fiscal quarter ending March 31.

AirAsia’s Thailand-based subsidiary, Thai AirAsia, also received a boost in the second quarter when Asia Aviation – which has a 55% stake in the Thai low-cost carrier – received a multi-million dollar investment from the country’s largest retail group. The Srivaddhanaprabha family, founders and owners of King Power Group, acquired 39.83% of Asia Aviation for US\$225m.

King Power Group has also stated its intention to acquire the outstanding stake in Asia Aviation.

**Sabre Plans New Route**

Following a busy year of acquisitions in 2015, technology and travel solutions firm Sabre Corporation made its first purchase of this year in the second quarter, in the form of Germany-based Airpas Aviation.

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Airpas provides technology that helps airlines plan their route networks more profitably and manage their costs. On announcing the deal, financial terms for which have not been disclosed, Sabre said: "With the integration of Airpas Aviation's solutions into the Sabre portfolio, airline customers will benefit from the efficiency of a cohesive commercial planning solution and working with one provider that fully understands and helps meet their commercial planning needs. In addition, the acquisition will open the Airpas solutions to Sabre's global customer base."

Travel technology firms were involved in a number of M&A transactions in 2015 and Sabre was no exception. In July 2015 Sabre completed the acquisition of Asia-Pacific-based global distribution system (GDS) Abacus International, and in November it agreed to acquire Trust Group, a central reservations, revenue management and hotel marketing provider with a significant presence in EMEA and Asia-Pacific.

"Following a busy year of acquisitions in 2015, technology and travel solutions firm Sabre Corporation made its first purchase of this year in the second quarter, in the form of Germany-based Airpas Aviation."

#### Key Takeaways

1. HNA Group, the owner of Chinese airline Hainan and a shareholder in a number of other carriers, acquires a 13% stake in Virgin Australia for US\$114m, while China's Nanshan Group buys a further 20% stake in the Australian carrier for US\$198m
2. CEFC China Energy Company acquires a 39.92% stake in Czech airline company Travel Service from UNIMEX Group for an undisclosed sum
3. Tune Live, a Malaysian holding company that is jointly owned by AirAsia chief executive Tony Fernandes and the airline's chairman, Kamarudin Meranun, acquires a 16.7% stake in AirAsia for US\$263m
4. Sabre Corporation acquires Airpas Aviation for an undisclosed sum

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## Q2 2016 Highlighted Airlines Transactions

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04/01/2016	AirAsia Bhd (16.73% Stake)	Tune Live Sdn Bhd	263
06/13/2016	Asia Aviation Pcl	Srivaddhanaprabha Family	225
06/10/2016	Virgin Australia Holdings Limited (19.98% Stake)	Nanshan Group Co., Ltd.	198
05/31/2016	Virgin Australia Holdings Limited (13% Stake)	HNA Aviation Group Co., Ltd.	114
04/01/2016	Travel Service, a.s. (39.92% Stake)	CEFC China Energy Company Limited	Not disclosed
04/19/2016	Airpas Aviation AG	Sabre Corporation	Not disclosed
06/13/2016	FLYdocs Systems Limited	Lufthansa Technik AG	Not disclosed

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# Aerospace

## TransDigm Maintains Acquisition Momentum

**After an acquisition-packed first three quarters of 2015, TransDigm Group continued its purchasing frenzy in Q2 2016 when it bought ILC Industries – the parent company of Data Device Corporation (DDC), a US-based provider of data bussing and motion and power control products – from private equity firm Behrman Capital for US\$1bn.**

DDC provides products for the aerospace, defense and industrial sectors, with defense accounting for its largest revenue stream at 75%. Aftermarket sales account for 70% of revenues, dovetailing with TransDigm's second-quarter earnings results, which show aftermarket revenue growth and increasing bookings from defense customers.

DDC has a large customer base and its military platforms include the JSF, F-18 and Eurofighter. On the commercial side, it has contracts on the Boeing 787 and the Airbus A350 XWB.

Announcing the deal in May, TransDigm chairman and chief executive W. Nicholas Howley described it as "another sizable acquisition opportunity that meets our strategic, operational and value-creation criteria". He added that TransDigm sees "opportunities for significant value creation".

The transaction is expected to be completed by the end of the third quarter.

TransDigm, a US-based manufacturer and supplier of highly-engineered commercial and military aircraft components, made three other large acquisitions in the first three quarters of 2015 and its latest acquisition shows the company's continuing drive to strengthen its presence on a number of platforms, including the 787 and A350.

In the third quarter of 2015 TransDigm agreed to acquire PneuDraulics – a US-based company specializing in supplying hydraulic and pneumatic components to the aerospace industry – for US\$325m in cash. This was preceded in Q2 2015 by the acquisition of Pexco Aerospace from private equity firm Odyssey Investment Partners for US\$496m. Prior to this, in Q1, it bought Telair Cargo Group from AAR for US\$725m.

### **Airbus Continues Divestiture of Non-Core Operations**

Following a trend from previous quarters, which has seen large aerospace firms consolidate and refocus on their

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core operations, Airbus Group was at the center of the largest transaction of the second quarter.

The European airframer divested its remaining 28% stake in Dassault Aviation, raising about US\$2.7bn. France-based Dassault manufactures Falcon business jets and Rafale fighter jets.

Airbus divested 42% of its Dassault stake in 2014 and sold a further 18.75% the following year. In the second quarter of this year it decided to sell off its remaining share. Institutional investors acquired approximately 7% of the shares and Dassault Aviation bought back 6%. Airbus also issued bonds which are exchangeable into Dassault Aviation shares.

The sale follows on from Airbus Group's decision in Q1 to sell its defense electronics division to US private equity firm Kohlberg Kravis Roberts (KKR) for US\$1.2bn. The unit's capabilities include electronic warfare, avionics and optronics and sensors.

**“Following a trend from previous quarters, which has seen large aerospace firms consolidate and refocus on their core operations, Airbus Group was at the center of the largest transaction of the second quarter.”**

The final Dassault stake sale is the latest spin-off by Airbus since announcing a strategy in 2014 to strengthen its focus on its core business activities.

### **Aerostar Expands With Warmelin Buy**

Aerostar Aerospace Manufacturing made its first add-on acquisition in Q2 since embarking upon a strategy of identifying and integrating high-performing suppliers in the aerospace machined component segment.

Aerostar, a Phoenix, Arizona-based manufacturer of complex machined aerospace parts, was acquired by private equity firm Nautic Partners in October 2015.

On June 1 it announced that it had acquired California-based Warmelin Precision Products for an undisclosed sum. Warmelin specializes in producing geometrically demanding parts using state-of-the-art, high-speed, five-axis machining techniques, allowing for rapid fabrication of critical components. Specific areas of focus include hydraulics, actuation and structural components.

The acquisition will enable Aerostar to gain a strong presence in Southern California. Together, the two businesses will operate a 100,000 square foot facility, from which Aerostar will serve a geographically diverse customer base.

Aerostar chief executive Joe Muklevicz said on announcing the deal that Warmelin's "adjacent capabilities will make the combined business a much stronger partner to our customers", adding that "we look forward to continuing the growth of our platform organically and through further acquisitions".

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### Metals Specialist Comes Under Flexible New Ownership

Aerospace metals companies lost none of their magnetism in the second quarter, continuing to attract investment. Q2 saw an agreement to acquire Kreisler Manufacturing Corporation, which makes precision metal components and assemblies for military and commercial engines and industrial gas turbines, by United Flexible for US\$29m. United Flexible manufactures flexible engineered solutions for the transfer of liquids and gases.

The acquisition is in line with United Flexible's strategy of becoming the pre-eminent designer and manufacturer of high-pressure and high-temperature gas and fluid conduits into mission critical systems for original equipment manufacturers (OEMs).

As one of the few established fixed tube and complex suppliers to this field, Kreisler complements United Flexible's product line and supports its potential for growth.

Upon closing, Kreisler president and chief executive Michael Stern will join United Flexible's senior management team as president of Kreisler. The combined company will have about 700 employees.

#### Key Takeaways

1. TransDigm Group buys ILC Industries, the parent company of Data Device Corporation, from private equity firm Behrman Capital for US\$1bn
2. Airbus Group divests its remaining stake in Dassault Aviation for US\$2.7bn
3. Aerostar Aerospace Manufacturing acquires machined components supplier Warmelin Precision Products
4. United Flexible agrees to buy precision metal components maker Kreisler Manufacturing Corporation for US\$29m

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## Q2 2016 Highlighted Aerospace Transactions

Announced Date	Target Company	Bidder Company	Deal Value US\$(m)
06/10/2016	Dassault Aviation SA	Investors, Dassault Aviation	2,700
05/24/2016	ILC Industries, Inc.	TransDigm Group Inc.	1,000
04/01/2016	Geometric Limited (excluding business sold to HCL Technologies Limited)	Dassault Systemes SA	69
06/18/2016	Xi'an Xinghang Aviation Manufacturing Co., Ltd. (52% Stake)	Suzhou Chunxing Precision Mechanical Co., Ltd.	33
05/31/2016	Kreisler Manufacturing Corporation	United Flexible Group	29
05/11/2016	Vanguard Space Technologies, Inc.	SolAero Technologies, Corp.	Not disclosed
05/19/2016	STAG Group Limited	Advanced Logistics for Aerospace SpA	Not disclosed
05/23/2016	JCB Aero SAS	AMAC Aerospace Switzerland AG	Not disclosed
05/26/2016	Avio-Diepen B.V.	Kapco Global	Not disclosed
06/01/2016	Warmelin Precision Products	Aerostar Aerospace Manufacturing, Inc.	Not disclosed
06/27/2016	Deharde Maschinenbau Helmut Hoffmann GmbH	Sued Beteiligungen GmbH; SCHULZ Systemtechnik GmbH	Not disclosed

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# Airport

## Private Equity Places Bets on Growing GSE Outsourcing Market

**Showing confidence in a European trend to outsource airport ground service equipment, private equity firm 3i Infrastructure and mutual fund manager Deutsche Asset & Wealth Management jointly agreed to acquire Belgian GSE (ground support equipment) leasing and services provider TCR International from Chequers Capital and Florac SAS for US\$228m.**

ICF provided commercial and business planning advice to the winning consortium and carried out a number of roles including a study of market position, competition and business resilience. ICF also undertook a GSE spend forecast for global regions and key countries, and leasing penetration rate forecasts within these markets.

TCR owns a fleet of approximately 20,000 GSE units and has operations at 100 airports across 13 countries, serving over 300 airlines.

On announcing the deal in April, 3i said that GSE leasing is becoming “an increasingly attractive model, as it offers greater flexibility than ownership and provides ground handlers with an external source of capital for investment”. The private equity firm said it would support TCR’s growth not only in Europe, but also internationally.

3i and Deutsche will each acquire up to 50% of TCR from Chequers Capital and Florac SAS, with any outstanding

equity to be held by the existing management team. The transaction has reached financial close following clearance from the European Commission.

### **China Shows Strong Appetite for European Airport Investment**

Chinese investors continued to put China’s One Belt, One Road strategy into practice in the second quarter with the acquisition of Tirana International Airport in Albania. The investment initiative aims to create logistical and trade hubs within China’s key economic partners across Eurasia.

Providing evidence of the importance placed by China on European gateways was the acquisition of Tirana International Airport (TIA) by Keen Dynamics Limited – a joint venture comprised of Hong Kong-based financial services firm China Everbright Limited and Friedmann Pacific Asset Management Limited. TIA is the concessionary

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developer and operator of Albania’s capital city airport – the country’s only international gateway. Keen Dynamics’ concession will operate to 2025, with the possibility of a two-year extension to 2027.

One half of the Keen Dynamics joint venture, China Everbright, is in the process of setting up a European M&A fund known as China Everbright Overseas Infrastructure Fund, with the purpose of investing in airports, shipping terminals and infrastructure. With this in mind and tying in with the One Belt, One Road initiative, expect to see more Chinese investment in European airports going forward.

The German federal state of Rhineland-Palatinate planned to sell its 82.5% stake in Frankfurt-Hahn Airport to Chinese construction and logistics firm Shanghai Yiqian Trading Co. (SYT) in a deal reported by Reuters to be valued at a “low double-digit euro amount”. SYT was also believed to be in the process of acquiring the remaining 17.5% of Frankfurt-Hahn from the German state of Hesse. However, SYT failed to make its initial payment, driving Rhineland-Palatinate to order an investigation. The findings showed that SYT had contacted Chinese authorities late with documents to allow the transfer of funds, leading to the missed payment. Rhineland-Palatinate has resumed talks with two other unidentified bidders.

### **Spanish ‘Ghost’ Airport Finally Secures Buyer**

Ciudad Real Airport, previously known as Don Quixote Airport, was finally sold in the second quarter after years

of standing empty – a victim of over-ambitious developers in Spain’s pre-financial crisis property boom.

The airport opened its doors in 2008 with the aim of acting as a lower-cost alternative to Madrid Barajas, which is located about 120 miles north of the central Spanish facility. However, the airport failed to attract enough airlines or customers and was forced to close in 2011. Since then it has stood empty, earning it the title of being one of Spain’s ‘ghost’ airports.

Ciudad Real entered bankruptcy in 2010 and was put up for sale three years later. In April 2016 a group of entrepreneurial investors called CR International acquired the airport for US\$63m.

CR International says it will continue to support the running and investment costs of the disused airport while it draws up a plan to reopen the facility as an international airport.

**“Chinese investors continued to put China’s One Belt, One Road strategy into practice in the second quarter with the acquisition of Tirana International Airport in Albania. The investment initiative aims to create logistical and trade hubs within China’s key economic partners across Eurasia.”**

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### Key Takeaways

- 1.** Private equity firm 3i Infrastructure and mutual fund manager Deutsche Asset & Wealth Management acquire Belgian GSE leasing and services provider TCR International from Chequers Capital and Florac SAS for US\$228m
- 2.** Chinese joint venture Keen Dynamics Limited acquires Albania's Tirana International Airport
- 3.** CR International buys disused Spanish airport Ciudad Real for US\$63m, with plans to reopen the facility

### Q2 2016 Highlighted Airport Transactions

Announced Date	Target Company	Bidder Company	Deal Value US\$(m)
04/29/2016	TCR International	Deutsche Asset & Wealth Management; 3i Infrastructure plc	228
04/15/2016	Ciudad Real Central Airport	CR International Airport S.L	63
04/25/2016	Tirana International Airport	Keen Dynamics Limited	Not disclosed

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# Tourism

## Online Travel Mergers Continue Apace

**Last year saw a number of M&A deals among online travel service providers and global distribution systems (GDSs), and this trend continues into 2016.**

Transactions that occurred in this sector last year include Amadeus' US\$830m acquisition of airline support services company Navitaire in Q3, and Sabre Corporation's Q2 acquisition of the rest of Asia-Pacific GDS, Abacus International, for US\$411m.

In the fourth quarter of last year, China's first- and second-largest online travel search engines, Qunar and Ctrip International, agreed to merge via a share swap valued at an estimated US\$3.4bn.

Carrying on this trend in Q2 of this year, UK-based travel commerce platform Travelport Worldwide acquired its third-party distributor in Japan, Galileo Japan, from a consortium of airline owners for an undisclosed sum.

Travelport has worked with Galileo Japan for many years and says the transaction will enable it to continue its expansion across Asia. The acquisition means that Travelport can now establish a new, consolidated Travelport Japan entity in the country, which it describes as one of the world's largest travel markets.

All former Galileo Japan employees, including managing director Yoshinobu Aoyama, will transition to the new Travelport entity which will be headquartered in Tokyo and supported by two satellite offices in Nagoya and Osaka.

The deal follows similar acquisitions in Greece, in 2010, and South Africa, in 2012, when Travelport acquired local distributors.

Another transaction in the online travel space in Q2 involved US-based Direct Travel, which bought online travel agency Traveline Travel Services. Family-owned Traveline focuses on corporate travel services and in 2015 had a turnover of US\$60m.

Direct Travel chief executive Ed Adams says the acquisition "shows our clear intent to continue our aggressive pursuit with growth opportunities and acquisitions that benefit our clients by strengthening our position as a leader in corporate travel well into the future".

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### TUI Strengthens Position in Europe Travel Market

Germany-based travel and tourism company TUI in May agreed to acquire the France- and Greece-based tour operator business units of Canadian tour operator Transat for an enterprise value of US\$62m.

For Transat, the sale follows its strategy of focusing on its expansion in the Americas. It says the transaction will have no impact on its transatlantic airline unit, Air Transat, which operates a number of direct routes from Canada to 30 European cities, as well as to 30 destinations in Mexico and the Caribbean.

For TUI, the acquisition of Transat France and Tourgreece will enhance its position in these two markets. Together, Transat France and Tourgreece have 800 employees and total sales represent approximately US\$500m.

#### Key Takeaway

1. Travelport Worldwide acquires its third-party distributor in Japan, Galileo Japan, from a consortium of airline owners for an undisclosed sum
2. Direct Travel buys online travel agency Traveline Travel Services
3. TUI acquires Transat's French and Greek units for US\$62m

### Q2 2016 Highlighted Tourism Transactions

Announced Date	Target Company	Bidder Company	Deal Value US\$(m)
05/11/2016	Transat A.T. Inc. (Transat France and Greece tour operating business units)	TUI AG	62
04/06/2016	OpenJaw Technologies Ltd.	TravelSky Technology Limited	39
04/20/2016	Travizon Travel Management	Corporate Travel Management Limited	21
04/06/2016	Galileo Japan K.K	Travelport Worldwide Limited	Not disclosed
05/18/2016	Traveline Travel Services	Direct Travel, Inc.	Not disclosed

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# Quarterly Spotlight

## UK Aviation and Brexit: Pragmatism Vs Politics



**Edmond Rose**

Vice President Airline Advisory,  
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Aviation has been an early casualty from the UK's vote to leave the European Union. And no wonder. Air travel is highly influenced by economic headwinds, currency fluctuations and an uncertain climate for business. The Brexit vote brings the prospect of the full trifecta while the reaction has also increased dollar-denominated costs for UK carriers. Stock markets have reacted strongly, wiping huge amounts of value not just from UK airlines but from European carriers like Ryanair and Lufthansa too.

One of the greatest uncertainties now facing the aviation community and its investors is regulatory. The UK is not only a major part of Europe's aviation - 28% of seats flying within the EU operate to, from or within the UK - it's also interlocked in Europe's aviation agreements. The two most crucial are membership of the European Common Aviation Area (ECAA) and participation in the EU-US "Open Skies" agreement.

Pragmatically, there are plenty of interests at play both in the UK and in the rest of the ECAA which should want the UK to stay within the Common Aviation Area. Irish, Hungarian and Norwegian carriers have significant operations between the UK and the rest of the ECAA which potentially become disallowed if the UK isn't inside the club. Airline consolidation, still proceeding more slowly in Europe than in the United States, would be hindered by having the UK on the outside. After all, one of Europe's largest existing consolidations, IAG, is anchored by BA, a UK carrier.



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There are also strong interests in keeping the UK within the EU-US aviation agreement. If the UK isn't part of that agreement, it could cause regulatory headaches for the transatlantic joint ventures which include the largest network carriers on both sides of the ocean. It would also disrupt the rights of EU carriers to fly between the UK and the US and UK carriers to fly between EU points and the US, even if they are only sparingly used.

So, there's a good chance that the UK will in time maintain its positions in the Common Aviation Area and within the EU-US agreement, alongside Norway and Iceland. However, politics will also play a part in what actually happens. Aviation is just one area that the UK has to negotiate with the EU on.

There are also other negotiating ambitions at play. Within aviation, there are questions such as the European Commission's interest in removing ownership and control rules between the EU and the US, while many in the US are calling for restricted access to carriers on grounds of their labor arrangements or alleged unfair competition. These could all complicate and prolong negotiations and definitely add to regulatory risk.

The pragmatic outcome is therefore not a foregone conclusion. Airlines which are exposed to potential risk from changes in the UK's regulatory position in European aviation would do well to look for new ways to serve their markets. That is likely to mean setting up new entities

in EU countries (for UK carriers) or in the UK (for carriers from outside the UK). It's no surprise that easyJet is doing just that, making the most of the opportunity to look for the most favorable country to use as a base.

And meanwhile, the airline sector will suffer from continuing uncertainty all round. Nimble adjustment of capacity and cost will be watchwords for some time until the outlook is clearer.

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# Quarterly Spotlight

## The CRABS are Getting Pinched



### Jonathan Berger

Vice President Aerospace & MRO Advisory,  
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Ten years from now, aviation industry analysts will look back at 2016 and fondly reminisce about “the good old days”. Today, aircraft manufacturers’ order books are at all-time highs, jet fuel prices are low, and airline profitability is at record levels. According to IATA, the airline industry is forecast to achieve a record \$36bn profit in 2016. However, a closer look at the financial data shows that the lion’s share of the profits are concentrated in North America.

There are three primary macroeconomic drivers for this global airline profit inequality: China’s financial slowdown, falling commodity prices, and foreign currency exchange rates (FOREX).

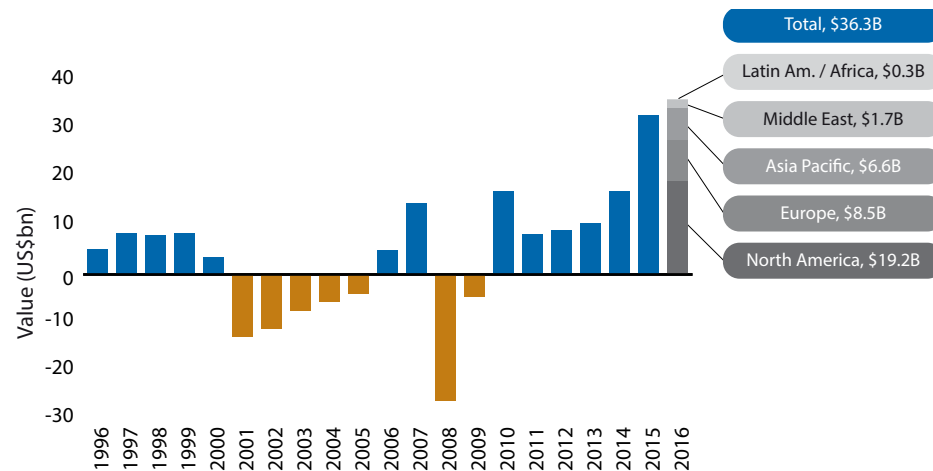
After years of double digit GDP growth, the Chinese economy has been steadily falling back to earth, with the IMF estimating a modest seven percent growth in 2016 and 2017. The accelerant to China’s staggering double digit GDP growth was its insatiable appetite for the

commodities required to support the construction boom of hundreds of new cities, roads, and airports throughout the country.

As the building boom slows, so has the demand for commodities. Accordingly, global commodity prices have fallen by more than 50% over the past five years.

### Global Airline Profitability, 1996 - 2016 Forecast

Sources: IATA, ICF Analysis



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When combined with lower oil & gas prices driven by the introduction of horizontal drilling and hydraulic fracturing technologies, the US dollar has dramatically strengthened, most pronouncedly against currencies in countries where the economy is highly dependent on commodity exports. Examples of these countries include Canada, Russia, Australia, Brazil, and South Africa, or as I like to call them, the CRABS.

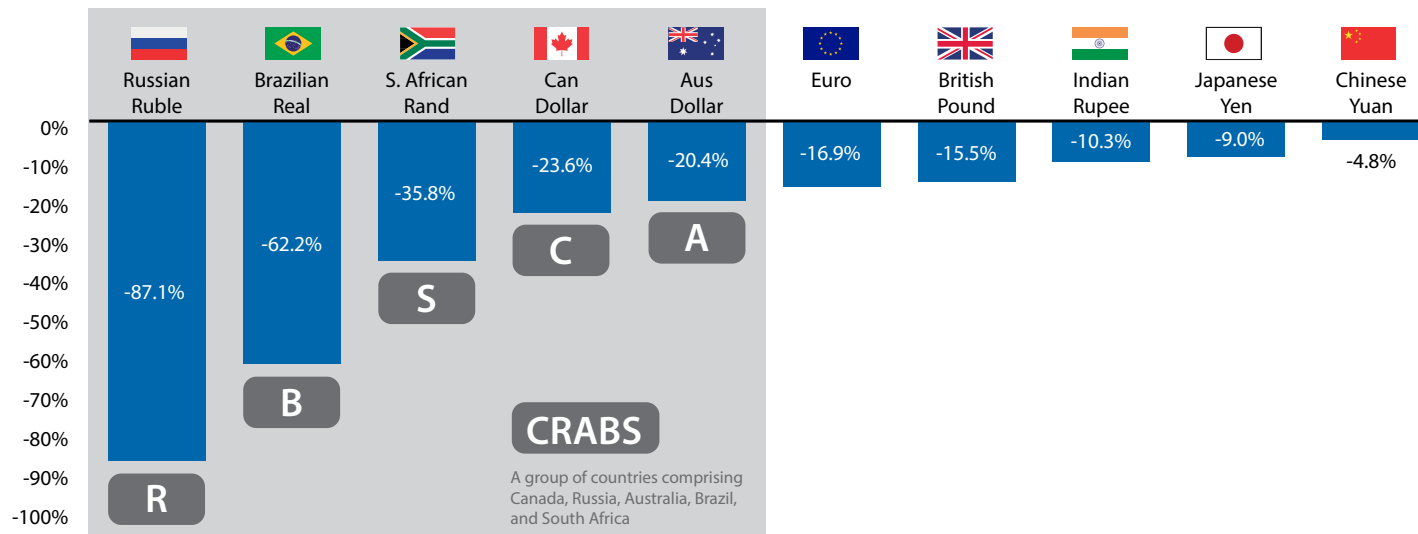
Global currency exchange rates are also dramatically impacting airlines, OEMs, MROs, and investors.

For airlines reliant on business with the CRABS, the financial benefits of cheap fuel are largely offset, while the cost of dollar-based MRO contracts (e.g. engine and component cost per flight hour agreements) and the cost of aircraft financing have become much more expensive. Conversely, MRO suppliers and OEMs based in CRAB countries are enjoying a labor cost advantage.

### Global Currency Exchange Rates vs USD

% Value Change, April 2014 - April 2016

Sources: Oanda historical rates, ICF analysis



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ICF's Aviation Consulting and Services business was founded as SH&E in 1963 and grew into one of the world's largest consulting firms specializing in aviation. In 2007, SH&E was acquired by ICF, and subsequently acquired the leading aerospace consultancy AeroStrategy in 2011.

Today, ICF's aviation professionals operate from full-service offices in Ann Arbor, New York, Boston, London, Beijing, and Singapore. Our staff of approximately 100 professionals encompass expertise in all disciplines of the industry, and the firm has provided consulting, strategic planning, and technical services to airlines, leasing companies, government agencies, airframe and engine manufacturers, corporate flight departments, heads-of-state flight departments, and financial institutions. ICF brings clients solutions through four specialized practices, which collaborate together and with clients to address business challenges: Aerospace & MRO, Aircraft, Airlines, and Airports.

In addition, ICF's aviation professionals provide expert buy-side and sell-side commercial and operational due diligence services to corporate clients, private equity firms, and other institutional investors with respect to investments across the entirety of the aviation ecosystem.

A more complete description of ICF's aviation experience and capabilities can be seen by visiting our website, [www.icfi.com/aviation](http://www.icfi.com/aviation)

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ICF International (NASDAQ:ICFI) provides professional services and technology solutions that deliver beneficial impact in areas critical to the world's future. ICF is fluent in the language of change, whether driven by markets, technology, or policy. Since 1969, we have combined a passion for our work with deep industry expertise to tackle our clients' most important challenges. We partner with clients around the globe – advising, executing, innovating – to help them define and achieve success. Our more than 5,000 employees serve government and commercial clients from more than 70 offices worldwide.

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