



Belly cargo

is currently a lifeline

Photo:

Weekly Aviation Headline News

WORLD NEWS

Etihad suspends all operations temporarily

AVITRADER Deblications

Etihad Airways has suspended all flights to, from, and via Abu Dhabi from March 25th. In order to limit the spread of covid-19 the airline will suspend services for an initial 14 days, subject to further directives by the relevant authorities — cargo operations are not affected. Tony Douglas, Group Chief Executive Officer, Etihad Aviation Group, said: "These are unprecedented times and unprecedented decisions are being made by governments, authorities and companies, including Etihad."

Big hit for European airline revenue says IATA

IATA has called for urgent action from European governments to provide financial relief to airlines. The latest IATA scenario for potential revenue loss by European carriers is US\$76 bn and passenger demand (measured in Revenue Passenger Kilometres) is projected to be 46% below 2019 levels. A decline of this magnitude puts at risk about 5.6 million jobs and \$378bn in GDP supported by air transport.

LATAM Cargo adds capacity amid covid-19 cutbacks

LATAM Cargo has made some changes to routes and capacity in response to the need for more capacity. In order to maximise the use of its Boeing 767-300 fleet and address the gap in belly capacity in passenger aircraft, the company has made significant modifications to its itinerary, and these include routeing changes and an increase in freighter frequencies. The current environment has forced air cargo operators to seek alternatives to satisfy shippers.



Cargo only flights

Flying vital supplies globally

Attempting to reduce the impact of the ongoing travel restrictions, several airlines have deployed their grounded passenger fleets on cargo only flights.

American Airlines for instance

are continuing to operate international widebody service to key locations around the globe, serving as a vital partner for freight forwarders and supporting global

trade in the face of the coronavirus pandemic.

American is flying passenger aircraft carrying cargo to locations including Auckland, São Paulo and Honolulu. These flights are in addition to

existing passenger flights which continue to operate between Dallas and London Heathrow, Miami and Tokyo Narita. American is also expanding its cargo capacity with more roundtrip flights between Dallas and Frankfurt.

"... with the disruption arising from the covid-19 pandemic our capabilities are more important than ever."

Tim Strauss, VP Cargo, Air Canada

Lufthansa loaded 30 tonnes of freight onto a passenger configured A330 from China to Frankfurt. In addition to belly hold cargo, overhead stowage compartment inside the cabin were also loaded with cargo. Shipments included

various highly urgent goods, mainly from the medical sector, including masks and other protective equipment.

Due to the far-reaching cancellations of passenger

connections, valuable airfreight capacity is lacking. The Lufthansa Group and Lufthansa Cargo are therefore looking into the possibility of operating further

flights exclusively for cargo transport on passenger aircraft.

Meanwhile, SWISS will also be using its passenger aircraft to perform pure cargo flights. The airline has

Continued on page 3





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...continued from page 1

already deployed its passenger aircraft to Hong Kong transporting only freight, and further such flights are currently being planned.

Air Canada's cargo division has begun using its aircraft to operate cargoonly flights to Europe, with other flights planned for Latin America and South America. The aircraft on these flights carry no passengers but move time-sensitive shipments, including medical supplies to combat covid-19 and goods to support the global economy.

"Air Canada Cargo has long served as a vital link in global supply

chains and with the disruption arising from the covid-19 pandemic our capabilities are more important than ever," stated Tim Strauss, Vice President of Cargo, at Air Canada.

The current coronavirus crisis has created unprecedented disruption which has hit the airline industry particularly hard and various airlines around the world are exploring opportunities for cargo charters on their passenger fleets.

AIRCRAFT & ENGINE NEWS

GA Telesis purchases five CF6-80C2B1F engines from Atlas Air

GA Telesis (GAT) has completed the acquisition of five General Electric CF6-80C2B1F engines from Atlas Air (Atlas) for part-out that will be immediately inducted for disassembly. The resulting used serviceable material (USM) will be directed towards GA Telesis' CF6 airline and MRO customer base, including GA Telesis Engine Services (GATES). These engines will allow for increased access to engine USM, which will help reduce the costs of heavy jet engine maintenance for airlines worldwide. In these turbulent times, GAT remains focused on growing and providing continuity of cost-saving solutions for its airline and MRO customers.

Air Seychelles takes delivery of new Airbus A320-200neo from ALC



Air Seychelles Photo: ALC

Air Lease Corporation (ALC) has delivered one new Airbus A320-200neo aircraft on long-term lease to Air Seychelles. Featuring CFM International LEAP-1A26 engines, this aircraft was delivered from ALC's order book with Airbus. "We are pleased to announce this new A320-200neo delivery to Air Seychelles and further ALC's long-time relationship with the airline," said Steven F. Udvar-Házy, Executive Chairman, Air Lease Corporation. "This new A320neo replaces an A320 aircraft that Air Seychelles previously had on lease from ALC and will enhance the airline's current fleet operations."



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AJW Group purchases CFM5B, A320-engine for tear-down

Group purchased a CFM56-5B4 engine for tear-down in support of expanding engine management programs. The highquality engine parts will be stored at AJW Group's HQ in Sussex, U.K. and shipped to its strategic hubs around the world ready for exchange and sale to support its airline customers' extensive portfolio of A320 family aircraft.



Photo: AJW Group headquarter warehouse

First passenger aircraft full of air cargo lands in Frankfurt



A330 cabin loading

Photo: Lufthansa Cargo

Loaded with around 30 tons of freight, a Lufthansa passenger aircraft landed in Frankfurt on March 25, after a flight time of 11 hours and 6 minutes. In addition to the cargo compartments the Airbus A330, the cabin including stowage compartments above the seats were also loaded. On board the aircraft, with the registration number D-AIKI, were various highly urgent goods, mainly from the medical sector, including masks and other protective equipment. The required permits for the flight were issued in seamless cooperation with the foreign ministries and embassies of the People's Republic of China and the

Federal Republic of Germany. Lufthansa Cargo is making every effort to strengthen security of supply by air. About half of the goods are normally transported in freighters, the other half in the bellies of passenger aircraft. Due to the far-reaching cancellations of passenger connections, valuable airfreight capacity is lacking. The Lufthansa Group and Lufthansa Cargo are therefore looking into the possibility of operating further flights exclusively for cargo transport on passenger aircraft. Especially in emergency and crisis situations, logistics and airfreight are of particular importance. In addition to urgent spare and machine parts, mainly sensitive pharmaceuticals and fresh goods are transported intercontinental by air. A Boeing 777F freighter has a standard load capacity of 103 tons.

MRO & PRODUCTION NEWS

Boeing to temporarily suspend Puget Sound production operations

Boeing has announced the temporary suspension of production operations at its Puget Sound area facilities in light of the state of emergency in Washington state and the company's continuous assessment of the accelerating spread of the coronavirus in the region. These actions are being taken to ensure the wellbeing of employees, their families and the local community, and will include an orderly shutdown consistent with the requirements of its customers. Boeing plans to begin reducing production activity today, March 23 and projects the suspension of such operations to begin on Wednesday, March 25, at sites across the Puget Sound area. The suspension of production operations will last 14 days, during which Boeing will continue to monitor government guidance and actions on COVID-19 and its associated impacts on all company operations. During this time, Boeing said, it will be conducting additional deep cleaning activities at impacted sites and establishing rigorous criteria for return to work.

MTU Aero Engines suspends operations at several facilities

MTU Aero Engines will temporarily suspend a large proportion of operations across several facilities in Europe. In doing so, the company is taking into account the interruptions in material supply that have begun. At the same time, it is doing its part to protect employees and contain the spread of the virus. In the areas that are required to stay operational, the company has enforced measures to protect its employees from infection. The temporary suspension will first affect MTU's manufacturing facilities in Munich, Germany, and Rzeszów, Poland, where engines are assembled, or engine components manufactured. Activities will be ramped down by the end of the week in a coordinated approach. Operations are expected to be suspended for three weeks from Monday, March 30. A week later, the company will suspend operations at its engine maintenance, repair and overhaul (MRO) facilities in Hannover and Ludwigsfelde, near Berlin. By deferring this slightly, the company will be able to complete shop visits and ensure an organized start to the suspension. Operations at these facilities are expected to be reduced to an absolute minimum for three weeks, the company will remain available to its customers.

Cessna SkyCourier starts ground engine tests



SkyCourier engine run

Photo: Textron Aviation

Textron Aviation has successfully completed initial ground engine tests on the prototype Cessna SkyCourier twin utility turboprop, featuring Pratt & Whitney Canada PT6A-65SC engines. These ground engine tests verified the functionality of the fuel system and engines, as well as the interface with the avionics and electrical systems. The Cessna SkyCourier program continues to advance with assembly of the prototype and additional five flight and ground test articles. The tail was installed on the fuselage in early February 2020. Power to the aircraft's electrical system was turned on in January, and the wings were successfully mated to the fuselage in December 2019.

Etihad Cargo deploys cargo-only Boeing 787s to complement freighter fleet



Photo: Etihad Cargo

Following the directive issued by the National Emergency Crisis and Disaster Management Authority and the General Civil Aviation Authority (GCAA) of the United Arab Emirates to temporarily suspend all passenger services to and from the UAE, Etihad Cargo continues to play a vital role in connecting key cargo markets and ensuring the UAE's import and export needs are adequately covered in line with current demand. To complement its fleet of Boeing 777 Freighters, Etihad Cargo is introducing a fleet of Boeing 787-10 aircraft as passenger freighters to operate 34-weekly flights, serving ten markets initially. Each aircraft will provide capacity for 12 lower-deck pallets and four containers, carrying up to 45 tons of payload. The passenger freighter network will introduce capacity, subject to permits, into India, Thailand, Singapore, Philippines, Indonesia, South Korea and other places where borders remain open for cargo. On top of that, the current freighter schedule will be enhanced by additional flights into Riyadh, London, Hong Kong and Shanghai. By utilizing the Boeing 787 in addition to its freighter fleet, Etihad Cargo will ensure the continuity of vital imports into the UAE including fruits, vegetables, meat, medical supplies, mail and ecommerce.



MRO & PRODUCTION NEWS

Spirit AeroSystems suspends Boeing production work for 14 days

Following Boeing's announcement temporarily suspend production at Washington state facilities, Spirit AeroSystems will also suspend Boeing work performed at its facilities in Wichita, Kansas, and in Tulsa and McAlester, Oklahoma. This action will begin Wednesday, March 25, and last 14 calendar days, until April 8. Spirit will continue to support 787 work for Boeing's Charleston, South Carolina, facility as needed. Spirit will use the time to further deep clean and sanitize workspaces and facilities as the company will continue to take precautions to protect the health and safety of its team.

Thomas Global gains TFD-7000 LCD flight displays Transport Canada STC for **Boeing 737/757/767**

Thomas Global Systems has achieved another regulatory certification milestone with receipt of Transport Canada Civil Aviation (TCCA) Supplemental Type Certificate (STC) approval for its TFD-7000 Series plug-and-play LCD flight displays for Boeing 737/757/767 CRTequipped aircraft. Transport Canada approval of the TFD-7000 Series follows FAA Technical Standard Order (TSO) authorization for Boeing 737/757/767 aircraft in July of 2019, and FAA STC approvals for Boeing 757/767 and 737-3/4/500 aircraft in July and October of last year, respectively. The TFD-7000 LCD solution is currently being installed in the U.S. on all three Boeing fleet types. With Transport Canada 737/757/767 STC approval achieved, Thomas Global is proceeding with validation of FAA approvals with the European Aviation Safety Authority (EASA) and other foreign regulators.

Bombardier suspends work at Canadian operations

Bombardier has released that in support of the recent mandates from the Governments

Liebherr-Aerospace Brazil enhances competitiveness

Liebherr-Aerospace Brazil has achieved a new milestone in the development of the company: from now on. when supplying parts to thirdpartv customers, the company will manage its supply chain and will hence increase its control over the share of its performance and of its competitiveness that is linked with its suppliers. Initially founded as a pure machining sub-contractor, Liebherr-Aerospace



Liebherr Aerospace Brazil facility in Guaratinguetá

Photo: Liehherr Aero-

Brazil gradually expanded in the past the scope of its capabilities by adding assembly of sub-components, painting and surface treatment. This enabled it to substantially enlarge its capacity to serve its customers' needs. The company has now completed one significant additional step for parts supplied to third-party customers, by building up the ability to select and manage suppliers, both domestic and international. Liebherr-Aerospace Brazil is now fully positioned as a full-scope supplier of complex machined sub-assemblies to serve customers in and outside Brazil.

of Quebec and Ontario to help slow the spread of the COVID-19 pandemic, it will suspend all non-essential work at most of its Canadian-based operations starting this evening (Tuesday March 24) at 11:59 pm, until April 26, 2020, inclusively. This suspension includes Bombardier's aircraft and rail production activities in the provinces of Quebec and Ontario. Employees impacted by these temporary shutdowns will be placed on furlough, as will corporate office employees whose support functions are less critical in the short-term. During this furlough period. Bombardier's CEO and senior leadership team will forgo their pay, and the Chairman and members of Bombardier's Board of Directors have agreed to forgo board compensation for the remainder of 2020. Bombardier is also suspending its 2020 financial outlook as it evaluates the impact of temporarily closing its Canadian operations, as well as other actions being taken in response to the COVID-19 pandemic.



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Borescope Inspection	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Boreblend	•		•	•	•	•	•	•																							
Top Case			•	•		•																									
C-Check	•	•	•	•	•	•	•	•	•	•	•	•	•	•															•		
Thrust Rating Conversion (per SB)	•	•	•	•	•	•																									
Engine Preservation	•	•	•	•	•	•						•																			
LRU and QEC	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•											•		
LPC Rotor Blade Removal/Installation	•	•	•	•	•	•							•	•																	
Minor Repairs, Inspected	•	•	•	•	•	•	•	•	•	•	•	•	•	•															•		
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MRO & PRODUCTION NEWS

Babcock joins forces to develop new ventilator solution

British engineer Babcock International Group (Babcock) has joined forces with a leading medical equipment company to design, manufacture and supply thousands of critical care ventilators for the NHS in response to the Government's urgent request for help from industry. A team of Babcock engineers and other specialists have worked round the clock to develop a supply chain solution to produce the ventilators. Positive input from the Cabinet Office has also facilitated engagement with a panel of leading clinical experts, including London's Royal Brompton Hospital, reputed worldwide for its expertise in respiratory medicine. Modern-day ventilators composed of hundreds of different specialist parts, however, with the race against time to save lives, a fully functional prototype with the focus on simplified ventilation principles and thereby fewer parts has been created in a matter of days, whilst meeting strict clinical requirements. Jon Hall, Managing Director of Technology for Babcock, said: "This is a critical time for the country as a whole and for the NHS in particular. When the opportunity arose for us to get involved in helping the NHS to save lives, we knew it was the right thing to do. I'm really proud of the commitment and innovation of everyone in the team, across Babcock and our medical and supply chain partners. Combining our engineering expertise with advances in medical technology has resulted in a solution that will help the NHS save lives. That capability, combined with a diverse supply chain will ensure that we can get this equipment manufactured, processed and delivered as a matter of urgency."

Longview Aviation to temporary suspend Dash 8-400 production



Dash 8-400 Photo: Longview Aviation

Longview Aviation, parent company of De Havilland Aircraft of Canada and Viking Air, announced the immediate suspension of manufacturing operations for new production Dash 8-400 aircraft at De Havilland's Downsview facility in Toronto, and new production Series 400 Twin Otter aircraft at Viking's facilities in Victoria, BC and Calgary, Alberta. Production on these aircraft will be paused until further notice. Approximately 800 employees or 65% of De Havilland's current workforce, and 180 employees or 40% of Viking current workforce will be affected. The global aviation industry is facing unprecedented uncertainty as a result of the novel coronavirus (COVID-19). Longview and its subsidiaries have been in close communication with customers and suppliers over the last several weeks. On the basis of these discussions, and against the backdrop of significantly reduced airline activity, Longview determined that it is necessary to pause all new aircraft production activity at this time. The suspension applies only to new aircraft production. Both De Havilland and Viking will continue to provide full product support and technical services to all in-service De Havilland and Viking aircraft. All other Longview business activities will continue as usual.

Vortex Aviation Dublin facility receives EASA certification

Vortex Aviation, a global "On-wing" turbine engine support company, providing 24/7 AOG support across Europe and neighboring countries, announced that its Dublin facility has received maintenance approval under EASA certification from the competent authorities (IAA) Irish Aviation Authority. Vortex Aviation, located in Dublin Ireland, provides engine hospital shop visit maintenance activities to support its global customer base of lessors, owners and operators, helping reduce heavy maintenance costs. The maintenance approval covers the majority of narrow-body and wide-body engine-types, for "On-wing" and "Off-wing" maintenance and includes Top Case and Engine Modular repairs on limited engine types. "I am proud to announce our

new facility for Vortex Dublin," said Jeff Lund, President and CEO, Kellstrom Aerospace Group. "Over the last two years, Vortex has become a global company building larger facilities in the US, Ireland and Singapore to meet the needs of global demand for on-wing support and surgical type repairs. The stateof-the-art facility in Dublin will allow Vortex to continue to meet the needs of our European customers to save engine maintenance cost. With the global epidemic and the amount of aircraft and engines on the ground, this facility will allow capability to store, preserve and provide lower cost maintenance to support airlines, MROs, financial institutions, lessors and OEM's."

FINANCIAL NEWS

Sabre announces over US\$200 million in cost saving actions

Sabre Corporation, the software and technology company that powers the global travel industry, is taking significant measures to strengthen its financial position in response to the current industry conditions. The travel industry continues to be adversely affected by the global health crisis caused by the outbreak of COVID-19, as well as by government directives that have been enacted to slow the spread of the virus. As part of these cost reductions, Sabre has begun implementing several immediate actions with regard to its workforce and other costs during this difficult business climate. These actions include: A reduction in the cash retainer for members

of its Board of Directors, Sabre's 401(k) match program will be temporarily suspended for U.S.-based employees who contribute to its 401(k) program. On a global basis, Sabre is offering voluntary unpaid time off, voluntary severance and a voluntary early retirement program, and is reducing third-party contracting, vendor costs and other discretionary spending. On March 16, Sabre's Board of Directors voted to suspend the payment of quarterly cash dividends on Sabre's common stock, effective with respect to the dividends occurring after the March 30, 2020 payment, and Sabre announced the suspension of its share repurchase program.

Finnair implements substantial funding plan

Finnair is implementing a substantial funding plan in order to secure the company's future even in a prolonged coronavirus situation. The plan includes funding instruments such as available credit lines, sale and leasebacks of unencumbered aircraft and a substantial, market-based pension premium loan. The available credit lines included in the funding plan consist of a revolving credit facility totaling €175 million which has already been raised. The statutory pension premium loan totals €600 million, and it has been proposed that the State of Finland would guarantee the loan. The Finnish Government's Ministerial Committee on Economic Policy has considered the guarantee matter on March19, 2020. It is still required that the Finnish Parliament approves the guarantee arrangement. The premium pension loan can be raised, if necessary. With the state guarantee, Finnair aims to further solidify its cash position and business continuity even if the coronavirus situation would prevail longer than currently anticipated. "The coronavirus is already now the biggest crisis in the 100-year history of aviation," says Topi Manner, Finnair's CEO. "Even though Finnair is among the strongest airlines at the start of the coronavirus crisis and we have a strong cash position and a healthy balance sheet, with this plan we aim to secure that we weather the exceptional situation and, considering the circumstances, are able to continue our operations from a steady basis once this situation is over." (€1.00 = US\$1.07 at time of publication.)

Airbus secures credit facility of €15 billion; withdraws 2020 guidance

Airbus will bolster its liquidity and balance sheet in response to the COVID-19 pandemic as it continues to assess the ongoing situation and the impact on its business, customers and

APOC Aviation establishes new dedicated landing gear division

APOC Aviation, the innovative leasing, trading and aircraft part-out specialist, has set up a specialist landing gear division to service a growing number of customers across leading airlines and MROs worldwide. With several A320 and B737 assets already out on lease or in active exchange programs, the company is seeking equipment for a wide range of Airbus, Boeing, Embraer and ATR aircraft types. According to Karolis Jurkevicius, VP Landing Gear Trading — APOC



Photo: APOC Aviation

Aviation, creating a dedicated landing gear division was the next logical step for APOC's expanding asset portfolio. "APOC Aviation has just celebrated its fifth anniversary, we are a young company with a dynamic investment strategy to build a strong foundation of engines and LDGs underpinned by independent and flexible repair management services. We have a close network of airline and MRO customers with whom we have been developing short and long-term lease agreements over recent years and now is the time to expand our capabilities." APOC Aviation has a selected number of audited LDG repair shops with whom it manages repairs for customers if so required. It also works with third party experts to tear down LDGs for piece parts for sale or to support customers' on-going overhaul projects. However, APOC is not an MRO shop itself. "Our LDGs on lease can be placed by the lessee in workshops of their choice – they are not tied into repair contracts as part of the lease agreement. Our customers like this flexibility which is unusual in the marketplace" says Jurkevicius.

Airbus adapts wing production amid COVID-19 outbreak



Photo: Airbus Bremen

While securing business continuity, Airbus, the world's largest planemaker, been has taking stringent measures to ensure the safety and wellbeing of its workforce during the current COVID-19 outbreak. Ωn Monday, March production resumed in Spain and France after four-day break for deep cleaning

and re-evaluation of the situation, while operations in the U.K., U.S., and Germany continued at normal production rates. Having reviewed completed stock levels and assessed them against demand from the Final Assembly Line, the company has chosen to pare back on wing production at its plants in both the U.K. and Germany, a situation that will remain in place for the next three weeks. At Filton and Broughton in the U.K., activities will be reduced and an Extended break at Easter taken. In Bremen, Germany, the working week will be reduced. According to an Airbus press release, the sites will remain open during this period and will continue to ensure wing deliveries to the final assembly lines, the receipt and control of materials and components from the supply chain, building and installation maintenance, critical administrative support and preparation for activity restart.

suppliers. Airbus' management has received approval from the Board of Directors to secure a new credit facility amounting to €15 billion in addition to the existing €3 billion revolving credit facility. The company will withdraw the 2019 dividend proposal of €1.80 per share with an overall cash value of approximately €1.4 billion and suspend the voluntary top up in pension funding. Given the limited visibility due to the evolving COVID-19 situation, the 2020 guidance is withdrawn. Operational scenarios, including measures to minimize cash requirements, have been identified and will be activated depending on the further development of the pandemic. With these decisions, the Company has significant liquidity available to cope with additional cash requirements related to the coronavirus. Liquidity resources previously standing at approximately €20 billion, comprising around €12 billion in financial assets at hand and around €8 billion in undrawn credit lines, were further bolstered by converting an existing €5 billion credit line into a new facility amounting to €15 billion. Available liquidity now amounts to approximately €30 billion. (€1.00 = US\$1.07 at time of publication.)

Triumph Group provides update on steps to mitigate COVID-19 impact

Triumph Group has provided an update on the current impact of the coronavirus (COVID-19) on the business and the steps the company is taking to mitigate it. The company is expanding its actions to limit the spread of COVID-19 consistent with U.S. and international government safeguards. Although the situation remains fluid, all factories remain operational. Triumph is complying with all mandates for

Lufthansa Technik expects massive drop in revenue after record year 2019



Low pressure turbine installation

Photo: LHT

Lufthansa Technik AG continued on its growth path in the past financial year and closed 2019 with record revenue and earnings. Revenue rose by 13% to €6.9 billion. Earnings before interest and taxes (adjusted EBIT) grew by around eleven percent to €493 million. The extent of the effects of the worldwide aviation crisis affecting Lufthansa Technik cannot yet be concretely foreseen, but the impact is already massive. Dr. Johannes Bussmann, Chairman of the Executive Board, said: "With the outbreak of the corona crisis, nothing is the same as it was just a few weeks ago. The maintenance industry is already suffering from the decline in air traffic. The full extent will hit us with a delay, which means a forecast is currently not possible, but first impacts are massive. Everything depends on the duration of the crisis and how our customers will recover from it. We have prepared ourselves with a very comprehensive package of measures - also, to be able to deliver at any time. Especially now, our customers need a reliable technical partner." Over the past five years, Lufthansa Technik AG's revenue has grown by almost 60%. In the last financial year alone, the company acquired 25 new customers and signed 625 contracts with new business worth €4.1bn. Compared to 2018, investments increased by 28% from €244 million to €313 million. On annual average, in 2019 Lufthansa Technik employed almost 26,000 people worldwide. (€1.00 = US\$1.07 at time of publication.)













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closure of non-essential operations. Triumph will adjust its plans as government decisions and company policies evolve. Given Boeing's plans to close their Washington state factories for 14 days, Triumph will evaluate the need to furlough employees at a subset of Triumph plants where capacity is largely dedicated to Boeing Commercial Aircraft programs. Regarding the Company's plans to respond to the COVID-19 crisis, and to conserve cash and maintain longterm competitiveness, the following actions are underway: Approximately 250 full-time salaried employee and 250 contractor positions will be eliminated. Severance will be paid to impacted employees consistent with existing policies. These reductions are expected to be completed by May 1, 2020. The Company will implement furloughs of two weeks for certain salaried employees over fiscal 2021 to minimize reductions in force. Additional furloughs may be required based on site closures or reductions in customer demand for Triumph's products and services. Base salaries and wages for hourly and most salaried employees will be maintained. Medical benefits will continue during furloughs. Triumph will suspend merit pay increases for all team members until the crisis has passed, while forgoing management increases for one year. Senior executives, including the CEO and direct reports, will forgo 10 percent of their base salaries starting April 1, 2020 during the crisis. Triumph's Board of Directors has elected to reduce their cash compensation during the crisis by 25%. The Board will continue to adjust executive and Director compensation as the situation warrants. Triumph disclosed on March 20, 2020 via Form 8-K filed with the SEC that it would suspend payment of a dividend for the foreseeable future to conserve cash for operational use. As a result of Triumph's decision to draw down its revolving credit facility, as disclosed on March 19, 2020, the company has cash of approximately US\$400 million and over US\$100 million of availability to support its working capital requirements.

HAECO acquires Jet Engine Solutions

Hong Kong Aircraft Engineering Company (HAECO Group) has acquired Jet Engine Solutions, (JES), an engine MRO based in Dallas, Texas, U.S. JES specializes in quick-turn repairs and lease-returns for commercial aircraft engines. The acquisition of JES forms part of HAECO's strategy to grow its Global Engine Support business. This includes the opening of a new GES location near Amsterdam. This facility is EASA Part 145 approved and located 20 minutes by road from Schiphol Airport, the Netherlands. The HAECO Global Engine Support facilities are located in the U.S., Europe and at HAECO's headquarters in Hong Kong.

Lilium completes funding round worth more than US\$240 million

Lilium, Munich-based aviation company developing an allelectric, vertical take-off and landing aircraft for regional air mobility, has completed internal funding round worth more than US\$240 million. The round was led by Tencent, with participation from other existing investors including



Photo: Lilium Jet

Atomico, Freigeist and LGT. The new funds bring the total sum raised to date to more than US\$340 million. They will be used to support further development of the Lilium Jet as well as underpinning preparations for serial production in Lilium's newly completed manufacturing facilities. As well as designing and manufacturing the Lilium Jet, the company plans to operate a regional air mobility service as early as 2025 in several regions around the world. It recently celebrated the completion of the first stage of flight testing, with the five-seater Lilium Jet demonstrator flying at speeds exceeding 100 km/h.

Norwegian fulfils criteria for initial NOK 300 million in guarantee from Norwegian Government



Photo: Norwegian

Norwegian has reported that two Nordic banks have obtained credit committee approval to provide a guarantee for the required 10% for the first tranche of NOK 300 million. Norwegian will secure the necessary headroom to pursue further guarantees from the Norwegian Government. On March 19, the Norwegian Government proposed a guarantee of NOK 6 billion for the Norwegian airline industry, of which up to NOK 3 billion is directed to Norwegian. The guarantee will be up to 90% from the Norwegian Government provided that financial institutions contribute with the remaining 10%. The guarantee scheme will consist of three tranches with a maximum two years maturity. Currently, most of the fleet is grounded and the Company has reduced its operations to a minimum. The Company will now primarily operate domestically in Norway and Sweden and between the Nordic capitals, in order to deliver on its corporate responsibility of maintaining critical infrastructure so that people and necessary goods and medical supplies can be transported during this unprecedented crisis. (US\$1.00 = NOK11.07 at time of publication.)

FACC scraps dividend and reassess Croatia plans

FACC, owned by China's Aviation Industry Corporation, is rapidly reassessing its €33 million (US\$36 million) project to build an automated, digitized production complex in Croatia. In addition, the company has opted not to pay a dividend for last year. The situation has come about through the aviation industry's reaction to the COVID-19 outbreak and, as a result, the company will also be reducing the working hours of many of its employees from April 6 for the next three months. FACC is responsible for the manufacture of plane parts, predominantly wings, tail assemblies and fuselages as well as engines and cabin interiors for all major plane manufacturers, employing over 3,500 staff in 13 countries across the globe. "The situation is very uncertain and changes daily or hourly," Chief Executive Robert Machtlinger said. "We have to find an optimal balance between protecting our workforce... and struggling to achieve the necessary economic stability, secure financial stamina and maintain the trust of our customers," adding that US\$800 million in existing orders was an encouraging sign. However, as a consequence of such an uncertain future, the Group would refrain from issuing a detailed forecast on its 2020 and 2021 earnings until the summer.

Boeing suspends dividends and CEO waives salary as planemaker seeks government loan

Boeing has confirmed that to assist with its request for government aid to aid both itself and other manufacturers in the aerospace supply chain, it will suspend paying any dividends, the company CEO will forego his salary, and the current embargo on share buybacks will remain in place, indefinitely. Like many companies in the aerospace sector, Boeing has been badly hit by the widespread economic effect of the COVD-19 outbreak and government aid will be critical to the survival of many. Boeing has been especially hard hit as it has been dealing with the fallout from the grounding of the 737 MAX nearly a year ago after two fatal crashes. "Boeing is drawing on all of its resources to sustain operations, support its workforce and customers, and maintain supply chain continuity through the COVID-19 crisis and for the long term," the company said late on Friday. Both Democrats and Republicans have made it clear that government aid should be subject to limitations on executive compensation, buybacks and dividends.

Qantas secures AU\$1.05 billion in additional liquidity



Photo: Qantas

Qantas Group has completed a new round of debt funding, securing AU\$1.05 billion in additional liquidity to strengthen its position as it manages through the coronavirus outbreak. This debt has been secured against part of the Group's fleet of unencumbered aircraft, which were bought with cash in recent years. The loan has a tenure

of up to ten-years at an interest rate of 2.75%. This funding increases the Group's available cash balance to AU\$2.95 billion with an additional AU\$1 billion undrawn facility remaining available. The Group's net debt position remains at the low end of its target range, at AU\$5.1 billion, with no major debt maturities until June 2021. In line with the rest of the Qantas debt book, the new funding contains no financial covenants. With a further AU\$3.5 billion in unencumbered assets, the Qantas Group retains flexibility to increase its cash balance as a prudent measure in the current climate. As previously announced, various steps have been taken to significantly reduce activity levels and costs given the dramatic revenue impact of the coronavirus pandemic and the related travel restrictions on Jetstar and Qantas passenger services. (US\$1.00 = AU\$1.68 at time of publication.)

IATA estimates industry passenger revenues could plummet US\$252 billion below 2019's figure

The International Air Transport Association (IATA) updated analysis of the revenue impact of the COVID-19 pandemic on the global air transport industry. Owing to the severity of travel restrictions and the expected global recession, IATA now estimates that industry passenger revenues could plummet US\$252 billion or 44% below 2019's figure. This is in a scenario in which severe travel restrictions last for up to three months, followed by a gradual economic recovery later this year. IATA's previous analysis of up to a US\$113 billion revenue loss was made on March 5, 2020, before the



Photo: IATA's Director General and CEO, Alexandre de Juniac

countries around the world introduced sweeping travel restrictions that largely eliminated the international air travel market. "The airline industry faces its gravest crisis. Within a matter of a few weeks, our previous worst-case scenario is looking better than our latest estimates. But without immediate government relief measures, there will not be an industry left standing. Airlines need US\$200 billion in liquidity support simply to make it through. Some governments have already stepped forward, but many more need to follow suit," said IATA's Director General and CEO, Alexandre de Juniac. The latest analysis envisions that under this scenario, severe restrictions on travel are lifted after 3 months. The recovery in travel demand later this year is weakened by the impact of global recession on jobs and confidence. Full year passenger demand (revenue passenger kilometers or RPKs) declines 38% compared to 2019. Industry capacity (available seat kilometer or ASKs) in domestic and international markets declines 65% during the second quarter ended June 30, compared to a year-ago period, but in this scenario recovers to a 10% decline in the fourth quarter.

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AVITRADER Weekly Aviation Headline News

OTHER NEWS

Singapore Airlines (SIA) will be cutting 96% of the capacity that had been originally scheduled up to the end of April, given the further tightening of border controls around the world over the last week to stem the COVID-19 outbreak. This will result in the grounding of around 138 SIA and SilkAir aircraft, out of a total fleet of 147, amid the greatest challenge that the SIA Group has faced in its existence. The Group's low-cost unit, Scoot, will also suspend most of its network, resulting in the grounding of 47 of its fleet of 49 aircraft. The SIA Group diversified its network and set up Scoot to cater to a wide range of passenger and market segments. However, without a domestic segment, the Group's airlines become more vulnerable when international markets increasingly restrict the free movement of people or ban air travel altogether. It is unclear when the SIA Group can begin to resume normal services, given the uncertainty as to when the stringent border controls will be lifted. The resultant collapse in the demand for air travel has led to a significant decline in SIA's passenger revenues. The Company is actively taking steps to build up its liquidity, and to reduce capital expenditure and operating costs.

Leonardo is extending its training service capabilities to include rotor craft unmanned aerial systems (UAS) to provide 360° training solutions to its growing customer base for maximized mission effectiveness and safety. The company has recently obtained an Authorized Training Organization Certificate for UAS released by **ENAC** (Italian National Civil Aviation Authority). With this certification Leonardo is now able to supply training services for light and very light category remotely piloted systems (up to 25 kg) through its Helicopter Training Academy headquartered in Sesto Calende (Northern Italy). This certification adds to the overall quality level and versatility of training services provided by Leonardo, making the company the first rotorcraft OEM with this capability - it is expected to be recognized by EASA in 2021. This latest service addition allows Leonardo to respond to the evolving market demands by those helicopter operators who are increasingly using small UAS for their missions, including those carrying out disaster relief and emergency response tasks.

Embraer has released that it is working in partnership with companies and research centers on technologies that can increase the availability of equipment and solutions to combat COVID-19 in Brazil. The actions, developed jointly with Embraer's supply chain, include the manufacturing of parts for the ventilator and respirator industry, the replacement of imported components for ventilators, the development of high-efficiency

filtration systems for transforming regular hospital beds into intensive care beds and studies for the development of simple, robust and portable respirators aimed at rapid implementation and availability. A group of professionals has already been leading initiatives in support of a respirator factory in Brazil, with a plan to start the production of parts next week, in response to the emergency demand for this equipment. Embraer, in cooperation with partner organizations, has already completed the technical and production capacity analysis required to meet the identified needs. In partnership with the Albert Einstein Hospital, located in São Paulo, Brazil, Embraer is also working to provide technical support for the development of biological air filter systems for air-quality control, which can convert regular hospital beds into intensive care beds. Using highly efficient filters for absorbing air particles, already utilized in air conditioning systems on aircraft, the objective is to provide this solution to hospitals with immediate needs. Another work front is dedicated to analyzing the manufacturing of control valves and flow sensors for another respirator industry in the country, in addition to adapting an existing respirator model for use in combating COVID-19.

John Bordeaux

teams that are involved in making **GECAS'** portfolio and investment decisions, namely Aircraft Trading, Commercial Operations Portfolio Strategy.

the

Having all these under one leader will ensure the company is taking a holistic view of its portfolio and buy-hold-sell decisions. Bordeaux is currently the Global Financial Planning & Analysis leader of GE Capital, a role he has held since May 2018. Prior to this, he has held several key roles in Finance and Capital Markets, namely serving in Managing Director roles in GE Energy Financial Services (EFS) and serving as Finance Leader for GE's Global Growth Sales & Project Finance team.

for

INDUSTRY PEOPLE



Sohaib Ahmed

• Trenchard Aviation Group has appointed Sohaib Ahmed as its Technical Sales Ahmed Manager. has worked in the aviation industry for over eight years and has held several sales positions

within aircraft cabin interiors and MRO businesses. With an extensive technical sales background across the aircraft cabin interiors sector, Ahmed has worked with many of the world's leading airlines, leasing companies and MROs delivering complex line-fit and retrofit projects. At Trenchard Aviation Group, he will be working closely with airlines, seating OEM's and aftermarket suppliers delivering sales of Life Vest Pouches and providing technical and commercial support from inquiry through to delivery and aftermarket care.

• John Bordeaux has been appointed as GECAS' Chief Investment Officer. He will take up the role from April 2020. Bordeaux will be responsible

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AviTrader Publications Corp. Suite 305, South Tower 5811 Cooney Road Richmond, BC Canada V6X 3M1

> **Publisher** Peter Jorssen Tel: +1 604 318 5207

Editor Heike Tamm editor@avitrader.com Tel: +34 (0) 971 612 130

Advertising Inquiries Tamar Jorssen **VP Sales & Business Development** tamar.jorssen@avitrader.com Toll free: +1 (833) 258 8543 Mobile: +1 (778) 213 8543

For inquiries and comments, please email: editor@avitrader.com







THE AIRCRAFT AND ENGINE MARKETPLACE

Commercial Jet Aircraft

Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
A319-100	DVB Bank	CFM56-5B63	3586	2008	Q3/2020	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A319-100	DVB Bank	V2522-A5	2375	2005	Q2/2021	Sale / Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A319-100	BBAM	CFM56-5B5/P	2129	2004	Apr 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A319-100	BBAM	CFM56-5B5	2249	2004	May 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A319-100	BBAM	CFM56-5B5/P	1362	2000	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A319-100	BBAM	CFM56-5B5/P	2251	2004	Mar 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A320-200	ORIX Aviation	CFM56-5B4/P	2584	2005	Q1/2021	Sale / Lease	Oisin Riordan	oisin.riordan@orix.ie	+353 86 335 0004
A320-200	TrueAero Asset Management	V2527E-A5	5794		Nov 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A320-200	TrueAero Asset Management	V2527E-A5	5531		Oct 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A320-200	TrueAero Asset Management	V2527E-A5	5296		Aug 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A320-200	TrueAero Asset Management	V2527E-A5	5089		Jun 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A320-200	TrueAero Asset Management	V2527E-A5	5050		Apr 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A320-200	DVB Bank	V2527-A5	3734	2009	Q1/2021	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A320-214	DVB Bank	CFM56-584/3	3767	2009	Q1/2021	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A320-230	DVB Bank	V2527-A5	4552	2010	Q4/2020	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A330-200	DVB Bank	CF6-80E	814	2007	Q1/2021	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
A330-200	GA Telesis	CF6-80E1A4	510	2002	Now	Sale	Mauro Francazi	aircraft@gatelesis.com	+1-954-676-3111
A330-200	Presidio Aircraft Leasing	CF6-80E1A3	871	2007	Now	Lease	Stephen Haire	shaire@aelfinc.com	+1 312 772 1613
A330-200	TrueAero Asset Management	CF6-80E1A4/B	882		Apr 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A330-200	TrueAero Asset Management	CF6-80E1A4/B	901		Apr 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A330-200	TrueAero Asset Management	CF6-80E1A4/B	932		May 2020	Lease	Ed Kokoszka	ekokoszka@trueaero.com	+1 772.663.2797
A330-223	Presidio Aircraft Leasing	PW4168A	970	2008	Now	Lease	Stephen Haire	shaire@aelfinc.com	+1 3127721613
A330-300	BBAM	Trent 772B-60	1544	2014	Jul 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A330-300	BBAM	Trent 772B-60	1562	2014	Sep 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
A330-300	DVB Bank	Trent 772B-6	1146	2010	Q1/2021	Sale / Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
B737-800	DVB Bank	CFM56-7B27	30654	2003	Q1/2021	Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449
B737-800	ORIX Aviation	CFM56-7B26E	38034	2012	Q4/2020	Sale / Lease	Oisin Riordan	oisin.riordan@orix.ie	+353 86 335 0004
B737-800	ORIX Aviation	CFM56-7B26	34153	2005	Q1/2021	Sale / Lease	Oisin Riordan	oisin.riordan@orix.ie	+353 86 335 0004
737-900	BBAM	CFM56-7B26/3	34953	2007	Dec 2020	Sale / Lease	Steve Zissis	info@bbam.com	+1 415 486 6100
B777-300ER	Doric	GE90-115BL1	35592	2009	Q2/2021	Sale / Lease	Maurick Groeneveld	maurick.groeneveld@doric.com	+49 (0)69 247559931
B777-300ER	Doric	GE90-115BL2	36158	2009	Q2/2021	Sale / Lease	Maurick Groeneveld	maurick.groeneveld@doric.com	+49 (0)69 247559931
B777-300ER	DVB Bank	GE90-115B	37705	2009	Q1/2021	Sale / Lease	Jonathan Louch	aircraftsales@dvbbank.com	+44 207 256 4449

Regional Jet / Turboprop Aircraft

Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
CRJ-200LR	Regional One	CF34-3B1	8062	2006	Now	Sale / Lease	Andre Boudreaux	Aboudreaux@regionalone.com	+1(305) 759-0670 Ext.164
CRJ-700	Regional One	CF34-8C5B1	10205	2005	Now	Sale / Lease	Andre Boudreaux	Aboudreaux@regionalone.com	+1(305) 759-0670 Ext.164
D0328 Jet	Regional One	PW306B	3185	2001	Now	Sale / Lease	Andre Boudreaux	Aboudreaux@regionalone.com	+1(305) 759-0670 Ext.164
ERJ170-100LR	Regional One	CF34-8E5	17000123	2006	Nov 2019	Sale / Lease	Andre Boudreaux	Aboudreaux@regionalone.com	+1(305) 759-0670 Ext.164











THE AIRCRAFT AND ENGINE MARKETPLACE

Regional Jet / Turboprop Aircraft (cont	Regiona	Jet /	Turboprop	Aircraft	(cont.
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ERJ-1458, Regular Circ	_	I Jet / Turboprop A		MSN	Year	Available	Sale / Lease	Contact	Email	Phone
Section Properties Proper			Engine AE3007A1							
Commercial Engines										+1(305) 759-0670 Ext.164
Multiple Engines GE / CFM / R8211 Now - Sale / Lease							<u> </u>			
AB3097 Engines		•	Sale / Lease		Comp	any		Contact	Email	Phone
	Multiple Engine	es GE / CFM / RB211	Now - Sale / Lea	se	GECA	S Engine Le	asing	Sherry Riley	engine.leasing@gecas.com	+1(513)782-4272
(I) AES007A1 Now - Sale/Lease/Exch Rois-Royce & Partners Finance Ben Ferguson Benjamin fleguson@rois-royce.com +44 7807 960 3 CF24 Engines Sale / Lease Company Contact Email Pho CF34-8E5 Now - Lease Luftharea Technik AERO Alvey Kai Ebach & debech@thero.com +46-6731-497-3 CF34-8E5 Now - Lease CF34-8E6 Now - Lease CF34-8E6 Now - Lease CF34-8E6 Now - Lease CF34-3B1 Now - Sale / Lease Regional One Miguel Bolivar mbolivar@RegionalOne.com +1 (768)-623-302 (1) CF34-9C81 Now - Sale / Lease Pho Now - Lease Willis Lease Sale Now - Sale / Lease Pho Now - Lease Willis Lease Sale Now - Sale / Lease Pho Now - Lease Now - Lease Now - Lease Sale Now - Lease Now - Sale / Lease Phone	AE3007 Engin	nes	Sale / Lease		Comp	any		Contact	Email	Phone
CF34 Engines	(3) AE3007A1	P	Now - Sale/Leas	e/Exch.	Regio	nal One		Miguel Bolivar	mbolivar@RegionalOne.com	+1 786-623-3936
CF34-BE5 Now - Lease Luthansa Technix AERO Alzey Kal Ebach k obsch@libaero com +49-6731-8973-8973-8973-8973-8973-8973-8973-8973	(1) AE3007A1		Now - Sale/Leas	e/Exch.	Rolls-l	Royce & Part	tners Finance	Ben Ferguson	Benjamin.ferguson@rolls-royce.com	+44 7807 969 372
CF34-BC Now - Lease CF34-BG Now - Sale / Lease DASI Jee Hutchings Joe hutchings@disal.com	CF34 Engines	3	Sale / Lease		Comp	any		Contact	Email	Phone
CF34-9EC Now - Sale / Lease Annow - Sale / Lease Regional One Miguel Bolivar mbolivar@RegionalOne.com #1 (786)-623-38 (1) CF34-3811 Now - Sale / Lease DASI Joe Hutchings joe hutchings@dasi.com #1 954-478-71 (2) CF34-10E8 Now - Lease DASI Joe Hutchings joe hutchings@dasi.com #1 954-478-71 (3) CF34-10E Now - Lease Mills Lease Joennifer Merriam leasing@millsiness.com #1 954-478-71 (1) CF34-10E6 Now - Lease Magellan Aviation Group Bill Polyi bill Polyi@magellangroup.net #1 (704) 504 202-042 (1) CF34-10E6 Now - Lease Engine Lease Finance Declan Madigan declan madigan@elfc.com #383 61 2017 CF34-8C6) Now - Sale / Lease Company Contact Email Pho (1) CF4-80C28F Now - Sale / Lease Company Contact Email #1-954-67-31 (1) CF6-80C28F Now - Sale / Lease Company Contact Email #1-954-67-31	CF34-8E5		Now - Lease		Luftha	nsa Technik	AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368
CF34-381 Now - Sale / Lease Regional One Miguel Bolivar mboilvar@RegionalOne.com +1 (769)-623-301 (2) GF34-3811 Now - Sale / Lease Regional One Miguel Bolivar mboilvar@RegionalOne.com +1 (769)-623-301 (2) GF34-10E8 Now - Lease DASI Joe Hutchings joe hutchings@dasi.com +1 954-478-71 (3) GF34-10E Now - Lease DASI Joe Hutchings joe hutchings@dasi.com +1 954-478-71 (4) GF34-8E5A1 Jan 2020 - Lease Migellan Aviation Group Ball Polyi bill polyi@magellangroup.net +1 (704) 504 92042 (1) GF34-8E5A1 Jan 2020 - Lease Egine Lease Finance Declar Madigan declan.madigan@efic.com +353 61 2917 GF34-8E(s) Now - Lease Egine Lease Finance Declar Madigan declan.madigan@efic.com +1 553 61 2917 CF34-8E(s) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine Leasing@gecas.com +1 (704) 504 62042 CF6 Engines Sale / Lease Company Contact Email Post Areas (1) CF6-80C289F Now - Sale / Lease Suler / Lease	CF34-10E		Now - Lease							
CF34-SQS Now - Sale / Lease	CF34-8C		Now - Lease							
2) CF34.8C581 Now - Sale / Lease Regional One Miguel Bolivar mbolivar@RegionalOne com +1 (786)e23-93 (1) CF34.3B1 Now - Sale / Lease DASI Joe Hutchings Joe hutchings@dasi.com +1 954.478-71 (3) CF34.10E Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 348-88 (1) CF34.8E5A1 Jan 2020 - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (704) 504 9204.2 (1) CF34.8E5A1 Jan 2020 - Lease Magelan Aviation Group Bill Polyi bill polyi@magellisngroup.net +1 (704) 504 9204.2 (1) CF34.10E6 Now - Lease Engine Lease Finance Declan Madigan declan.madigan@elfc.com +353 61 2917 (1) CF34.10E6 Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine.leasing@gecas.com +1 (513) 782.42 (1) CF6.80C281F Now - Sale / Lease GA Telesis Eddo Wiejer eviejer@gatelesis.com +1-954-676.31 (1) CF6.80C281F Now - Sale / Lease GA Telesis Eddo Wiejer eviejer@gatelesis.com +1-954-676.31 (1) CF6.80C281F Now - Sale / Lease Castelake Stuart MacGregor stuart.macgregor@castelake.com +1-420719061 (1) CF6.80C281F Now - Sale / Lease Castelake Stuart MacGregor stuart.macgregor@castelake.com +1-420719061 (1) CF6.80C281F Now - Lease Castelake Stuart MacGregor stuart.macgregor@castelake.com +1-772.925.60C (1) CF6.80C281F Now - Lease Company Contact Email Pho CF6.80C281F Now - Sale / Lease Company Contact Email Pho CF6.80C281F Now - Lease Company Contact Email Pho CF6.80C281F Now - Lease Company Contact Email Pho CF6.80C281F CF6.80C281F Contact Email CF6.80C281F CF6.80C281F Contact Email CF6.80C281F CF6.8	CF34-3B1		Now - Sale							
(1) GF34-381 Now - Sale / Lease DASI Joe Hutchings Joe.hutchings@dasl.com +1 954-478-71 (3) GF34-10E Now - Lease Willis Lease Jennifer Merriam leasing@willislasse.com +1 (561) 349-89 (1) GF34-8E5A1 Jan 2020 - Lease Magelian Aviation Group Bill Polyi bill polyi@magellangroup.net +1 (704) 504 92042 (1) GF34-8E5A1 Jan 2020 - Lease Magelian Aviation Group Bill Polyi bill polyi@magellangroup.net +1 (704) 504 92042 (1) GF34-8E5A1 Jan 2020 - Lease Engine Lease Finance Declan Madigan declan.madigan@elfc.com +353 61 2917 GF34-8E(s) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine leasing@gecas.com +1 (513) 782-42 GF6 Engines Salo / Lease GECAS Engine Leasing Sherry Riley engine leasing@gecas.com +1 (513) 782-42 GF6 Engines Salo / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-676-31 (1) GF6-80C28BF Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-676-31 (1) GF6-80C28BF Now - Sale / Lease (2) GF8-80C28BF Now - Sale / Lease (3) GF8-80C28BF Now - Sale / Lease (3) GF8-80C28BF Now - Sale / Lease (4) GF8-80C28BF Now - Lease (4)	CF34-3A		Now - Sale / Lea	se						
2) CF34-10E6	(2) CF34-8C5E	31	Now - Sale / Lea	se	Regio	nal One		Miguel Bolivar	mbolivar@RegionalOne.com	+1 (786)-623-3936
(1) CF34-9E5A1 Jan 2020 - Lease Magellan Aviation Group Bill Polyi bill.polyi@magellangroup.net +1 (561) 349-86 (1) CF34-9E5A1 Jan 2020 - Lease Magellan Aviation Group Bill Polyi bill.polyi@magellangroup.net +1 (704) 504 9204x2 (1) CF34-9E5A1 Jan 2020 - Lease Birnece Berlance Declan Madigan declan.madigan@elfc.com +353 61 2017 CF34-9E6A) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine.leasing@gecas.com +1 (513) 782-42 CF84-9E6A) Now - Sale / Lease Company Contact Email Photo (1) CF8-90C286F Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-676-31 (1) CF8-90C287F Now - Sale / Lease (1) CF8-90E1A4 Now - Sale / Lease Castelake Stuart MacGregor stuart.macgregor@eastelake.com +1-772-926-11 (1) CF8-90C287F Now - Sale / Lease Castelake Stuart MacGregor stuart.macgregor@eastelake.com +1-772-926-11 (1) CF8-90C287F Now - Lease True-Aero Asset Management Ed Kokoszka ekokoszka@true-aero.com +1-772-926-11 (1) CF8-90C287F Now - Sale / Lease Company Contact Email Photo (2) CFM56-564/P Now - Lease Company Contact Email Photo (2) CFM56-586 (all thrust levels) Now - Sale / Lease Company Contact Email Photo (2) CFM56-588 (all thrust levels) Now - Sale / Lease Domany Contact Email Photo (2) CFM56-588 (all thrust levels) Now - Lease Portress investment Group Tom McFarland tmcfarland@fortress.com +1-788-785-07 (2) CFM56-588/P Now - Lease Willis Lease Jennier More - Jennier Merriam Leasing@willislease.com +1-1 (561) 349-88 (1) CFM56-588/P Now - Lease (1) CFM56-588/P Now - Lease (2) CFM56-7822/3 Now - Lease (2) CFM56-7822/3 Now - Lease (3) CFM56-7	(1) CF34-3B1		Now - Sale / Lea	se						
(1) CF34-8E5A1 Jan 2020 - Lease Magellan Aviation Group Bill Polyl bill_polyl@magellangroup.net +1 (704) 504 920422 (1) CF34-8C5A1 Jan 2020 - Lease (1) CF34-8C5A1 Jan 2020 - Lease Engine Lease Finance Declan Madigan declan.madigan@elfc.com +353 61 2917 CF34-8E(s) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine.leasing@gecas.com +1 (513) 782-42 CF6 Engines Salo / Lease GCAS Engine Leasing Sherry Riley engine.leasing@gecas.com +1 (513) 782-42 (1) CF6-8DC2B6F Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-676-31 (1) CF6-8DC2B1F Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-676-31 (1) CF6-8DC2B7F Now - Sale / Lease (1) CF6-8DC2B7F Now - Sale / Lease (1) CF6-8DC2B1F Now - Sale / Lease (1) CF6-8DC2B1F Now - Sale / Lease (2) Castelake Stuart MacGregor stuart.macgregor@castelake.com +4420719061 (1) CF6-8DC2B1F Now - Lease TrueAero Asset Management Ed Kokoszka ekokoszka@trueaero.com +1 772 925 801 (2) CFM56-5B4/P Now - Sale / Lease Company Contact Email Pho (2) CFM56-5B4 (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) Now - Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-5B4/P (Vull QEC) Now Sale / Lease Jense Portress Investment Group Tom McFarland tmcfarland@fortress.com +1 (581) 349-88 (1) CFM56-5B4/P Now - Lease (2) CFM56-7B22/3 Now - Lease (3) CFM56-7B22/3	(2) CF34-10E6	3	Now - Lease		DASI			Joe Hutchings	joe.hutchings@dasi.com	+1 954-478-7195
(1) CF34-8C5A1 Jan 2020 - Lease (1) CF34-10E6 Now - Lease Engine Lease Finance Decian Madigan declan.madigan@elfc.com +353 61 2917 CF34-8E(s) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine.leasing@gecas.com +1 (513) 782-42 CF6 Engines Sale / Lease Company Contact Email Pho (1) CF6-80C28BF Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-876-31 (1) CF6-80C28BF Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +1-954-876-31 (1) CF6-80C28FF Now - Sale / Lease (1) CF6-80C28FF Now - Sale / Lease (1) CF6-80C2BFF Now - Sale / Lease GA Telesis Eddo Wiejer ewiejer@gatelesis.com +4-420719061 (1) CF6-80C2BFF Now - Sale / Lease Eddo Wiejer ewiejer@gatelesis.com +4-420719061 (1) CF6-80C2BFF Now - Sale / Lease Castelake Stuart MacGregor stuart.macgregor@castlelake.com +4-420719061 (1) CF6-80C2BFF Now - Lease TrueAero Asset Management Ed Kokoszka ekokoszka@trueaero.com +1 1772 925 807 CFM Engines Sale / Lease Company Contact Email Pho (2) CFM56-58 (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-78 (all thrust levels) Now - Sale / Lease Portress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7824/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-584/9 Now - Lease	(3) CF34-10E		Now - Lease		Willis	Lease		Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
Company	(1) CF34-8E5A	A1	Jan 2020 - Lease	е	Magel	llan Aviation	Group	Bill Polyi	bill.polyi@magellangroup.net	+1 (704) 504 9204x202
CF34-8E(s) Now - Sale / Lease GECAS Engine Leasing Sherry Riley engine leasing@gecas.com +1 (513) 782-42	(1) CF34-8C5A	A1	Jan 2020 - Lease	е						
Contact Email Pho	(1) CF34-10E6	3	Now - Lease		Engine	e Lease Fina	nce	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
CFG-80C2B6F	CF34-8E(s)		Now - Sale / Lea	se	GECA	S Engine Le	asing	Sherry Riley	engine.leasing@gecas.com	+1 (513) 782-4272
1) CF6-80C2B1F	CF6 Engines		Sale / Lease		Comp	any		Contact	Email	Phone
(1) CF6-80C2B7F Now - Sale / Lease (1) CF6-80E1A4 Now - Sale / Lease (1) CF6-80E1A4 Now - Sale / Lease (1) CFM56-5C4/P Mar 2020 - Sale / Lease Castlelake Stuart MacGregor stuart.macgregor@castlelake.com +4420719061 (1) CF6-80C2B1F Now - Lease TrueAero Asset Management Ed Kokoszka ekokoszka@trueaero.com +1 772 925 80: CFM Englines Sale / Lease Company Contact Email Pho (2) CFM56-5B (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-5B4/P Now - Lease (2) CFM56-7B22/3 Now - Lease (3) CFM56-7B22/3 Now - Lease (4) CFM56-7B22/3 Now - Lease	(1) CF6-80C2E	36F	Now - Sale / Lea	se	GA Te	elesis		Eddo Wiejer	ewiejer@gatelesis.com	+1-954-676-3111
1) CF6-80E1A4	(1) CF6-80C2E	31F	Now - Sale / Lea	se						
(1) CFM56-5C4/P Mar 2020 - Sale / Lease Castlelake Stuart MacGregor stuart.macgregor@castlelake.com +4420719061 (1) CF6-80C2B1F Now - Lease TrueAero Asset Management Ed Kokoszka ekokoszka@trueaero.com +1 772 925 803 CFM Engines Sale / Lease Company Contact Email Pho (2) CFM56-5B (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/P Now - Lease (1) CFM56-5B4/P Now - Lease (2) CFM56-7B22/3 Now - Lease (3) CFM56-7B24/E Now - Lease	(1) CF6-80C2E	B7F	Now - Sale / Lea	se						
(1) CF6-80C2B1F Now - Lease TrueAero Asset Management Ed Kokoszka ekokoszka@trueaero.com +1 772 925 803 CFM Engines Sale / Lease Company Contact Email Pho (2) CFM56-5B (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/9 Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24/E Now - Lease	(1) CF6-80E1A	A4	Now - Sale / Lea	se						
CFM Engines Sale / Lease Company Contact Email Pho (2) CFM56-5B (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/3 Now - Lease Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease Now - Lease (2) CFM56-7B24E Now - Lease Now - Lease	(1) CFM56-5C	4/P	Mar 2020 - Sale	/ Lease	Castle	elake		Stuart MacGregor	stuart.macgregor@castlelake.com	+442071906138
(2) CFM56-5B (all thrust levels) Now - Sale / Lease Contrail Aviation Kevin Milligan kevin@contrail.com +1 949-933-07 (2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/3 Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24/E Now - Lease	(1) CF6-80C2E	31F	Now - Lease		TrueA	ero Asset Ma	anagement	Ed Kokoszka	ekokoszka@trueaero.com	+1 772 925 8032
(2) CFM56-7B (all thrust levels) (1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/3 Now - Lease (1) CFM56-5B6/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	CFM Engines		Sale / Lease		Comp	any		Contact	Email	Phone
(1) CFM56-5B4/P (full QEC) Now Sale / Lease Fortress Investment Group Tom McFarland tmcfarland@fortress.com +1 786 785 07 (3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/3 Now - Lease (1) CFM56-5B6/P Now - Lease (1) CFM56-5B4/P Now - Lease (2) CFM56-7B22/3 Now - Lease	(2) CFM56-5B	(all thrust levels)	Now - Sale / Lea	se	Contra	ail Aviation		Kevin Milligan	kevin@contrail.com	+1 949-933-0797
(3) CFM56-7B24/3 Now - Lease Willis Lease Jennifer Merriam leasing@willislease.com +1 (561) 349-89 (1) CFM56-5B4/3 Now - Lease (1) CFM56-5B6/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	(2) CFM56-7B	(all thrust levels)								
(1) CFM56-5B4/3 Now - Lease (1) CFM56-5B6/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	(1) CFM56-5B	4/P (full QEC)	Now Sale / Leas	e	Fortre	ss Investmer	nt Group	Tom McFarland	tmcfarland@fortress.com	+1 786 785 0787
(1) CFM56-5B6/P Now - Lease (1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	(3) CFM56-7B	24/3	Now - Lease		Willis	Lease		Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) CFM56-5B4/P Now - Lease (1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	(1) CFM56-5B-	4/3	Now - Lease							
(1) CFM56-7B22/3 Now - Lease (2) CFM56-7B24E Now - Lease	(1) CFM56-5B	6/P	Now - Lease							
(2) CFM56-7B24E Now - Lease	(1) CFM56-5B	4/P	Now - Lease							
	(1) CFM56-7B	22/3	Now - Lease							
(I) OFFICE TRAT	(2) CFM56-7B	24E	Now - Lease							
(1) CFM56-7B27 Now - Lease	(1) CFM56-7B	27	Now - Lease							







THE AIRCRAFT AND ENGINE MARKETPLACE

Commercia	I Engino	. / 4 \
Commercia	i Ellulle:	(CONT.)

Commercial Engines (cont.)					
(2) CFM56-5A	Now - Sale	GECAS Engine Leasing	Sherry Riley	engine.leasing@gecas.com	+1(513)782-4272
(1) CFM56-5B3/3	Now - Lease	Rolls-Royce & Partners Finance	Charlie Ferguson	charlie.ferguson@rolls-royce.com	+44-(0)7772224895
(2) CFM56-7B22	Now - Sale	CFM Materials	Jimmy Hill	jimmy.hill@cfmmaterials.com	+1 -214-988-6670
(1) CFM56-7B26/E	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) CFM56-7B26	Now - Lease				
(1) CFM56-7B24/E	Now - Lease				
(1) CFM56-5B3/3	Now - Lease				
(1) CFM56-5B4/3	Now - Lease				
(2) CFM56-7B22	Now - Sale / Lease	GA Telesis	Eddo Wiejer	ewiejer@gatelesis.com	+1-954-676-3111
(2) CFM56-5B6	Now - Sale / Lease	577 1 515515	Zado Mojo.	omoje:@gatolocio.com	11304 010 0111
(2) CFM56-5B4/P	Now - Lease	TrueAero Asset Management	Ed Kokoszka	ekokoszka@trueaero.com	+1 772 925 8032
(2) CFM56-7B26/27	Now - Lease	Magellan Aviation Group	Bill Polyi	bill.polyi@magellangroup.net	+1 (704) 504 9204 x202
• •	Now - Lease	Magellan Aviation Group	Bill Folyl	biii.poiyi@mageilarigroup.net	+1 (704) 504 9204 X202
(2) CFM56-5B6/P					
(1) CFM56-5B4/P	Now - Lease				
JT8D and JT9D Engines	Sale / Lease	Company	Contact	Email	Phone
(1) JT8D-219	Now - Sale	AZURE RESOURCES INC.	Jeff Young	jeff@azureres.com	1-954-249-7935
GE90 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) GE90-115B	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(2) GE90-115	Now - Lease	TrueAero Asset Management	Ed Kokoszka	ekokoszka@trueaero.com	+1 772 925 8032
(1) GE90-115BL (Propulsor)	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
GEnx Engines	Sale / Lease	Company	Contact	Email	Phone
(1) GEnx1B74/75 Propulsor	Jan 2020 - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
LEAP Engines	Sale / Lease	Company	Contact	Email	Phone
(2) LEAP-1B28	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) LEAP-1A33	Mar 2020 - Lease				
(1) LEAP-1A32	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) LEAP1A-32	Now - Lease	Rolls-Royce & Partners Finance	Charlie Ferguson	charlie.ferguson@rolls-royce.com	+44-(0)7772224895
PW 4000 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW4056-1C	Now - Sale / Lease	GA Telesis	Eddo Wiejer	ewiejer@gatelesis.com	+1-954-676-3111
PW Small Engines	Sale / Lease	Company	Contact	Email	Phone
(3) PW121	Now - Sale / Lease	Magellan Aviation Group	Bill Polyi		+1 (704) 504 9204 x202
		Magerian Aviation Group	DIII POIYI	bill.polyi@magellangroup.net	±1 (704) 504 9204 X202
					. (,
(1) PW123B/E	Now - Sale / Lease				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(1) PW123B/E (3) PW127E/F/M	Now - Sale / Lease Now - Sale / Lease				. (),
(1) PW123B/E (3) PW127E/F/M (1) PW150A	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease				
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch.	Willis Lease	David Desaulniers	leasing@willislease.com	+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease		David Desaulniers	leasing@willislease.com	
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch.		David Desaulniers		
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch.		David Desaulniers Kai Ebach	leasing@willislease.com k.ebach@lhaero.com	
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch.	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Lease Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR)	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW17M PW119B RGB PW119B PW120A PW121 (ATR) PW124B	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B	Now - Sale / Lease Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F	Now - Sale / Lease Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A	Now - Sale / Lease Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW123B PW123B PW125B PW127F PW150A PW127M	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease			+1 (561) 349-8950
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW123B PW123B PW125B PW127F PW150A PW127M PW150A PW127M PW150A RGB	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+1 (561) 349-8950 +49-6731-497-368
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW123B PW125B PW125B PW127F PW150A PW127M PW150A PW127M PW150A RGB (1) PW124B	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW123B PW125B PW127F PW150A PW127M PW150A RGB (1) PW124B (2) PW127E/F	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+1 (561) 349-8950 +49-6731-497-368
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127W (1) PW124B (2) PW127E/F (4) PW127M	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127F (1) PW124B (2) PW127F (4) PW127F (4) PW127M (1) PW118	Now - Sale / Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW125B PW127F PW150A PW127F PW150A PW127F (1) PW124B (2) PW127F/F (4) PW127F (4) PW127M (1) PW118 (1) PW118A	Now - Sale / Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127F (W1 PW124B (2) PW127F/F (4) PW127F (4) PW127M (1) PW118A (1) PW119B	Now - Sale / Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW125B PW127F PW150A PW127F PW150A PW127F (1) PW124B (2) PW127F/F (4) PW127F (4) PW127M (1) PW118 (1) PW118A	Now - Sale / Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127F (W1 PW124B (2) PW127F/F (4) PW127F (4) PW127M (1) PW118A (1) PW119B	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange Now - Lease / Exchange Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127F (W1 PW127M (W1 PW127M (W1 PW127M (W1 PW127M (W1 PW127M (W1 PW127M (W1 PW118A (W1 PW119B (W1 PW119B (W1 PW121)	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262
(1) PW123B/E (3) PW127E/F/M (1) PW150A (2) PW123 (2) PW150A (2) PW150A (2) PW127M PW119B RGB PW119B PW120A PW121 (ATR) PW124B PW123B PW125B PW127F PW150A PW127F PW150A PW127F (4) PW127M (1) PW124B (1) PW118 (1) PW118 (1) PW119B (1) PW121 (1) PW121A	Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease Now - Sale / Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Lease / Sale/Lease/Exch. Now - Sale/Lease/Exch. Now - Sale/Lease / Exchange Now - Lease / Exchange	Willis Lease Lufthansa Technik AERO Alzey	Kai Ebach Jean-Christian Morin	k.ebach@lhaero.com jcmorin@logix.aero	+1 (561) 349-8950 +49-6731-497-368 +33.6.4782.4262



Commercial Engines (cont.)

Continue Clar Engines (cont.)					
PW Small Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW120A	Now - Sale / Lease	Regional One	Miguel Bolivar	mbolivar@RegionalOne.com	+1 (786)-623-3936
(1) PW120	Now - Sale/Lease/Exch.				
(1) PW123E	Now - Sale/Lease/Exch.				
(4) PW126	Now - Sale/Lease/Exch.				
(1) PW121	Now - Sale/Lease/Exch.				
Trent Engines	Sale / Lease	Company	Contact	Email	Phone
(1) Trent 772B	Now - Sale/Lease/Exch.	Rolls-Royce & Partners Finance	Ben Ferguson	Benjamin.ferguson@rolls-royce.com	+44 7807 969 372
(2) Trent 772B-60	Jul 2020 - Sale / Lease	BBAM	Steve Zissis	info@bbam.com	+1 415 486 6100
V2500 Engines	Sale / Lease	Company	Contact	Email	Phone
(2) V2533-A5	Now - Sale/Lease/Exch.	Rolls-Royce & Partners Finance	Ben Ferguson	Benjamin.ferguson@rolls-royce.com	+44 7807 969 372
(2) V2533-A5	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) V2527-A5	Now - Lease				
(2) V2527-A5	Jan 2020 - Sale / Lease	Magellan Aviation Group	Bill Polyi	bill.polyi@magellangroup.net	+1 (704) 504 9204 x202
(1) V2527-A5	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) V2533-A5	Now - Lease	-	-		
(1) V2527-A5	Now - Sale / Lease	GA Telesis	Eddo Wiejer	ewiejer@gatelesis.com	+1-954-676-3111
(1) V2533-A5	Now - Lease	TrueAero Asset Management	Ed Kokoszka	ekokoszka@trueaero.com	+1 772 925 8032
(1) V2527-A5	Now - Lease				
Aircraft and Engine Parts, Co	omponents and Mi	sc. Equipment			
Description		Company	Contact	Email	Phone
(1) A320-200 Landing Gear	Now - Sale/Lease/Exch.	TrueAero, LLC	Matt Parker	mparker@trueaero.com	+1 469-607-6110
A340-300/A330 Landing Gear	Now - Sale/Lease/Exch.				
A340-600 Landing Gear	Now - Sale/Lease/Exch.				
B777-200 Landing Gear	Now - Sale/Lease/Exch.				
Trent 552 Inlet Cowls & Fan Cowls	Now - Sale/Lease/Exch.				
Trent 892 Inlet Cowls and Fan Cowls	Now - Sale/Lease/Exch.				
CFM56-5B Inlet Cowls and Fan Cowls	Now - Sale/Lease/Exch.				
V2500-A5 Inlet Cowls & Fan Cowls	Now - Sale/Lease/Exch.				
CF6-80E Trust Reversers, Inlets & Fan Cowls	Now - Sale/Lease/Exch.				
APUs (2) APS2300	Now - Sale/Lease/Exch.				
APUs (2) GTCP331-500B, (1) APS3200	Now - Sale/Lease/Exch.				
Neutral CFM56-7B QEC Kit	Q4/2019 - Sale	CFM Materials	Michael Arellano	Michael.Arellano@cfmmaterials.com	+1-214-988-6676
767-300ER 413K, 737-300 LANDING GEAR	Now - Sale/Lease/Exch.	AZURE RESOURCES INC.	Jeff Young	jeff@azureres.com	1-954-249-7935
GTCP85-98DHF APU	Now - Sale/Lease/Exch.	, <u>Lone nego ono</u> 20 mo.	och roung	Jon@azaroros.som	1 001 210 1000
A320 Nose Landing Gear	Now - Sale/Lease/Exch.				
CFM56-3 LPT MODULE, REPAIRED	Now - Sale/Lease/Exch.				
CFM56-3 ENGINE STAND	Now - Lease				
(1) GTCP36-150RJ, (2) GTCP36-100M,	Now - Sale/Lease/Exch.	Regional One	Miguel Bolivar	mbolivar@RegionalOne.com	+1 (786)-623-3936
(1) RE220RJ, (1) PW126 RGB, (1) PW901A	Now - Galo/Edasc/Exon.	regional one	Wilgaer Bollvar	mbonvar@regionalene.com	1 (700) 020 0000
(1) APS1000-C12, (1) APS1000-C3					
GTCP131-9A (2), GTCP131-9B(2)	Now - Lease	REVIMA APU	Olivier Hy	olivier.hy@revima-apu.com	+33(0)235563515
GTCP331-200, GTCP331-250	Now - Lease	NEVIIVIA AI O	Olivier Try	olivier.ny@revilna-apu.com	133(0)233303313
APS300C14(3), APS1000C12(2), APS2000	Now - Lease Now - Lease				
APS2300, APS3200(2), APS5000(2)					
PW901A(4), PW901C(2)	Now - Sale / Lease Now - Sale				
TSCP700-4E		David Assa	OMI		
(1) PW901A APU	Now - Sale	Royal Aero	Gary MacLeod	gary@royalaero.com	+44 (0)141 389 3014
Neutral V2500-A5 QEC Kits (2) 745K9001-64	Now - Sale	ASI Aero	Dean Morgan	deanm@asiaero.net	+1 561-771-4253
(1) GTCP131-9B	Now - Sale / Lease	DASI	Chris Glascock	Chris.Glascock@dasi.com	+1 954-801-3592
(4) GTCP131-9A, (1) GTCP131-9B, (2) GTCP3		GA Telesis		apu@gatelesis.com	+1-954-676-3111
(1) GTCP331-200ER, (1) GTCP331-550, (1) AI					
GTCP131-9A, GTCP131-9B, GTCP331-350C		Logix.Aero	Jean-Christian Morin	jcmorin@logix.aero	+33.6.4782.4262
GTCP331-500B, GTCP331-200/250, APS5000			Rich Lewsley	rlewsley@logix.aero	+1 602 517 8210
APS3200, APS2300					
(1) APU GTCP331-500	Now - Sale / Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
Engine stands now available	Now - Lease				
(2) PW901A, (1) PW901C(1), PW125B RGB	Now - Lease	Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368