IN BRIEF

CSERIES IS HOT-AND-HIGH STUFF

Bombardier has seen its CSeries outperform original range expectations for hotand-high conditions. At Farnborough air show, the Canadian manufacturer disclosed that the CS100 and the CS300 had exceeded the targets by 150nm (278km) and 450nm, respectively. Having recently completed flight testing, Bombardier says CS300 launch customer Air Baltic can fly a total of 2.469nm with the aircraft. The Latvian carrier will therefore be able to operate the CS300 on its Riga-Abu

BRAVO COMMITS T0 10 LM-100JS

Bravo Industries has announced that it will purchase 10 Lockheed Martin LM-100J $commercial\ freighters.\ The$ logistics and defence group, running operations in Brazil and throughout South America, will receive its first LM-100J during the fouth quarter of 2019, and the last example by mid-2020.

FALCO ON THE WING IN MID EAST

Leonardo has won the first two customers for its upgraded Falco Evo unmanned air vehicle, although has yet to finalise contracts with the clients. Leonardo says the two new clients are from the Middle

DOWTY TO SUPPLY PROPS FOR AN-132

Antonov has selected Dowty to supply propellers for the An-132 transport that the Ukrainian airframer is developing together with Saudi Arabia, UK-based Dowty has disclosed that it signed in January a contract with Antonov to supply six-blade composite propellers for the demonstrator twin-turboprop, which will be powered by Pratt & Whitney Canada PW150A engines. The R408 propeller system features air-foils with an "advanced swept design" and is also installed on the Bombardier Q400, the GE subsidiary adds. In addition to supplying propellers, Dowty will provide the equipment with strain gauges for ground and flight testing, and assist Antonov during the programme with further support including training.

PIAGGIO AERO APPOINTS AL SAIF

Piaggio Aerospace said at the show yesterday that it has chosen Saudi company Al Saif Trading Establishment as commercial agent for marketing the Avanti Evo in Saudi Arabia, Kuwait, Bahrain, Qatar, Oman and Iraq.

RUILI FIRMS 787-9S AS ORDERS PILE IN

> By GRAHAM DUNN

hinese carrier Ruili Airlines will add its first widebodies after firming its plan to order six Boeing 787-9s.

While the manufacturer will only post the deal on its orders & deliveries website once all contingencies are cleared, Boeing Commercial Airplanes chief executive Ray Conner cies relate only to government approvals, and that all commercial terms have been finalised.

Ruili's intent to order the Dreamliners was first disclosed in May at a ceremony marking its two-year anniver-

The manufacturer also revealed Air Europa and EgyptAir as the airlines behind

ders in its backlog covering 20 Boeing 737 Max 8 jets for the Spanish carrier and nine 737-800s for the Egyptian airline. **Dubai Aerospace Enterprise** will finance eight of the EgyptAir aircraft.

Boeing also disclosed deals covering 10 Converted Freighters. Bulgaria's Cargo Air and Colombia's LAS Cargo will

800BCFs, while Air Algerie has signed a commitment for two aircraft of the same variant. The first 737-800BCF is set to be delivered in the fourth quarter of 2017.

An unidentified customer meanwhile, has ordered

On the Airbus front, Avianca Brazil parent Synergy Aerospace finalised a purchase agreement covering 62 A320n-eo-family aircraft, firming a



G-Wizz! Record deal for P&W

Central European budget carrier Wizz has signed a deal to buy as many as 432 Pratt & Whitney PW1100G engines.

Worth \$2.5 billion at list prices, this is the largest single engine order placed during the Farnborough air show so far. The deal to power the Budapest-based airline's 110 Airbus . A321neos on order also includes purchase rights on engines for another 90 of the aircraft if Wizz exercises all of its options, says chief executive Jozsef Varadi.

Though the International Aero Engines V2500 operator had a legacy with P&W, it decided to launch a competition for the A321neo engine selection.



STEP UP: Boeing's Ray Conner (left) with Ruili's Zhanwei Ma

G550 LOOKS TO BE A GOOD CALL

Bombardier has provided additional information to the US Air Force following the service's proposal to sole-source a Gulfstream G550 to fulfill the Lockheed Martin EC-130H Compass Call's mission.

In May, the air force suggested Gulstream's jet was the only option which did not require additional development or certification work. While US House members praised the proposal as a means to accelerate the recapitalisation programme, Senators have called for an open competition in their version of the fiscal year 2017 National Defence Authorisation act.

While Bombardier has stopped short of saving it will protest a sole-source decision. the company is looking to open up a dialogue with the air force on the Compass Call competition, Stephan Villeneuve, Bombardier's vice-president of specialised aircraft said yesterday.



SUPPORT: Lebanon will use the type for intelligence

Super Tucanos are go

Production is under way on the first Embraer A-29 Super Tucanos for the Lebanese air force, with delivery to start at the beginning of 2017.

In November, the US government

agreed a \$173 million foreign military sales contract that will see Embraer's US partner Sierra Nevada deliver six of the light-attack turboprops to the Lebanese air force by 2019.

The aircraft will be handed over to the US Air Force early next year, itthen commissions the fleet to Lebanon,

says Geraldo Gomes, vice-president of business development for Embraer.

The Super Tucanos will support Lebanon's fleet of intelligence and reconnaissance Cessna 208B Caravans, although Orbital ATK also received a contract last March to modify the Cessnas to carry Lockheed Martin Hellfire missiles.

Since the aircraft's inception in the mid-1990s, Embraer has sold the turboprop to more than 13 countries

Qinetiq's material benefits

Qinetiq has displayed a new composite material that could make aircraft up to three times more resistant to damage from impact strikes, while also reducing weight.

The company says the new Shape Memory Alloy is comprised of titanium wires woven into a carbonfibre

reinforced polymer. Testing of the alloy simulating collisions with aircraft leading edges showed a threefold increase in strength compared with normal carbonfibre of the same mass. That suggests it could be used to provide resistance to birdstrikes and other impacts.

Further testing in collaboration with GE has shown that SMA could also be used to protect the underside of aircraft for protection against burst tyres.

Andrew Foreman, head of engineering research and consultancy at Qinetiq, says the material's low weight and added strength could make aircraft safer and more fuel efficient.

OPTICA HAS PRODUCTION IN SIGHT

AeroElivra's iconic Optica observation aircraft has been thrown a lifeline by US consultancy Inter-Flight Global (IFG). The Miami, Florida-based company will begin in August a three-month valuation of the dormant programme, and if the valuation is approved by the UK company, production could restart in 2018 - 26 years after it was halted.

"We are purely focused on the value of the assets; such as the tooling, drawings, production and type certificates, jigs, demonstrator aircraft; intellectual property; unsold inventory and parts," says Oscar Garcia, chairman and chief executive

Garcia believes the Optica which entered service in 1985 -

has a lot of potential. "With its composite design and digital technology, its design was ahead of its time," he says. "All the enablers that could turn it into a popular modern aircraft - notably avionics and engine technology - are here. But we can only base our valuation on what the programme is worth in



stage," he says. This includes drawing up a business plan for the programme, appointing suppliers, and setting up production. "If all goes to plan, we aim to relaunch production within 12-18 months." adds Garcia. John Edgley, owner and

its current form, and without

Garcia says IFG has already

we could proceed to the next

earmarked investors. "If the val-

further funding, it is stale.'

designer of the three-seat Optica, and chairman of AeroElvira says: "I'm delighted with IFG's interest in the Optica. I look forward to seeing it back in production.'