

Market overview: ecube is one of Europe's largest narrowbody end-of-life service providers.

Sum of the parts

LARA investigates how the regional and narrowbody aircraft teardown market is faring and what aviation service providers are doing to meet the rising challenges.

According to Fortune Business Insight's *Global Commercial Aircraft, Disassembly, Dismantling and Recycling* report, the teardown market is projected to grow from US\$6.74 billion in 2022 to US\$14.35 billion by 2032, with a compound annual growth rate (CAGR) of 8%.

But as OEM backlogs for new-generation aircraft are holding up aircraft retirement from operators' and lessors' fleets, fewer teardown candidates are reaching the market.

Set against this backdrop, there are still increasing requirements for used serviceable material (USM) from airlines and MROs as passenger traffic increases.

So how are service providers coping where supply doesn't quite match demand?

PRICE PRESSURE

An all-encompassing aviation integrator, GA Telesis manages the entire life cycle of an aircraft from procurement to teardown.

While the company does not perform its own aircraft teardowns in-house, it manages

a large supplier base of teardown facilities across the globe, alongside acquiring individual parts for sale.

Jason Reed, President of Flight Solution Group at GA Telesis, tells LARA: "The teardown market has contracted significantly in the last couple of years, as well as in 2023. The amount of single-aisle airline lift demanded today is significant, larger than the 2019 timeframe."

He adds: "The amount of teardowns [GA Telesis] achieved last year alone was only around 470 units, around 60% of a usual teardown year."

This reduction in availability is in turn driving a spike in acquisition prices.

Kevin C Wall, CCO of aircraft part-out and component support specialists APOC Aviation, attributes the increasing prices to the number of new entrants in the teardown market, making what aircraft there are available for teardown even scarcer.

He says: "We are seeing a significant increase in price for teardown aircraft and engines.

"As more and more entrants to the teardown market appear and availability of teardown candidate aircraft is sometimes limited, price pressure is inevitable."

KNOCK-ON EFFECT

C&L Aviation Group's CEO Chris Kilgour agrees, although he notes that there is some flexibility in the prices for regional aircraft.

Like GA Telesis, C&L Aviation operates a "cradle to grave" service – from acquisition to teardown to part-out and repair.

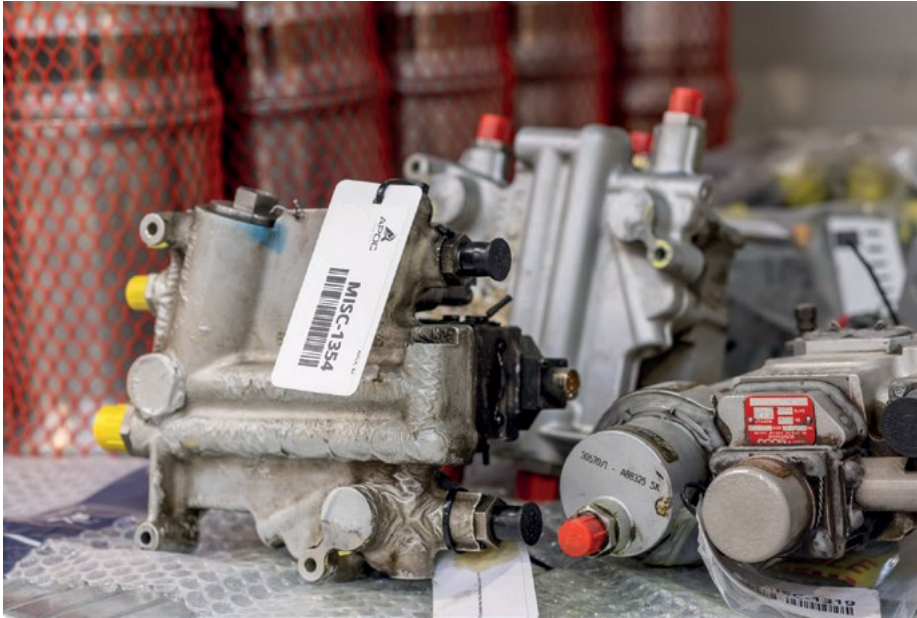
"I think the market at the moment is a little subdued because of aircraft prices," Kilgour says. "We're starting to see a little softness in prices and they're coming down to where they are normally as aircraft deliveries happen."

Yet this is a slower return than expected. As airlines extend leases on their aircraft, this in turn is having a knock-on effect on older aircraft arriving at aircraft teardown facilities.

"It's hard to make a teardown make sense when prices are high," Kilgour adds. "Late deliveries are holding up prices for used aircraft because they're more in demand – at least on the regional side."

Steven Taylor, the CCO of ecube, one **»»»**





Material advantage: on the used serviceable material (USM) side of its operation, APOC Aviation has developed Alicanto, an inventory management system for searching for, sourcing and delivering parts. Photo: APOC Aviation

of Europe's largest narrowbody end-of-life service providers, anticipates that more time will be needed for MROs to really get a sense of how these backlogs will affect the market.

Whilst ecube doesn't acquire the aircraft itself, it does connect buyers and sellers, which gives it a good market overview.

As a result, the service provider's biggest

challenge still revolves around the predictability of teardown requirements, particularly given this price increase.

"Our customers are extracting as much revenue from that end-of-life phase as they can," says Taylor.

"It's only when they have confidence there's no demand, that's when they'll send it to us.

"I think over the next six months we should get a good sense of whether the OEM increased production rates are actually washing through to retirements.

"We do intend this [amount of aircraft available] to rebalance in Europe over the rest of the year."

Reed gives a somewhat more definitive, if optimistic, timeline for when service providers might see the market open up again.

"We anticipate the teardown numbers will shift upwards in 2024 when OEM asset deliveries begin to increase – and see a full return to normal by 2025."

DEMAND CURVE

But what about the aircraft that are currently arriving at facilities?

Teardown and repair company Vallair has seen a slow but steady uptick in aircraft coming into its MRO facility in Montpellier, France, after it restarted its teardown programme at the end of last year.

Within the last three months it has completed one A321 teardown for itself, and two A321 teardowns for customers.

Vallair's Director of Material Management, Armando Filho, tells *LARA* they have also

the new CAAC teardown regulations are a key challenge for GA Telesis's customers with the sale of USM parts to its Chinese customers.

As one of the few CAAC-certified companies outside China, GA Telesis likewise has to follow these new regulations so parts have "full trace, back to birth, by all ASA or CAMAC-certified aftermarket suppliers and repair shops".

But Reed is hopeful that the regulatory environment will soon soften to open up the market more.

He says: "Today, ASA is working with the Chinese authorities to see if that rule can be loosened, since not all providers of maintenance and supply chain will fit that description."

Regions and regulations

Whilst the European teardown market might be facing the brunt of global MRO challenges, elsewhere it's a slightly different story.

Ecube's Steven Taylor says the company's US base is thriving and represents a "huge step forward" for the business.

With enquiries from low-fare carriers JetBlue, Spirit Airlines and Sun Country already under its belt, the US market is active with teardowns due to the sheer volume of narrowbodies, despite the different average age of aircraft

retirement compared to Europe.

"There's been increased activity in the US compared to Europe," says Taylor. "Largely due to legacy aircraft stored for periods now being transacted for sale and teardown.

"That being said, the US has always been a sizeable teardown market due to the large domestic operating fleet and corresponding USM demand, so we are pleased to have planted our flag there."

Ecube expects to increase its current global market share of 16% with the addition of this newest facility.

Over in China, the requirement to follow

noticed an uplift in sales in narrowbody parts.

“An increase in sales of around 30 to 40%,” he says. “This makes it a very interesting market for us, especially because Vallair is a one-stop shop with our own in-house capabilities.”

The company has future plans to bring in A320 and A330 family aircraft teardowns, in line with its plans to expand and reach new customers and markets.

Meanwhile, APOC Aviation’s Kevin C Wall says he is seeing a significant demand for parts from narrowbody teardowns.

“As mentioned, a CAGR of almost 8% is being seen in this segment, and this represents significant demand,” he says.

Wall adds that “B737NG and Airbus A320CEO are in high demand,” with older

“This makes it a very interesting market for us, especially because Vallair is a one-stop shop with our own in-house capabilities.”

Armando Filho, Director of Material Management, Vallair

types like the B737 Classic and B757 becoming “increasingly niche markets.”

The company is currently targeting a growth in teardowns between 12 to 15 airframes per year.

Particular parts within the aircraft are

increasing in value, due to the life extensions of aircraft, as Jason Reed at GA Telesis notes.

“The APU in particular is one of the hottest items [in the market], both on the A320 and 737NG products. Coupled with the extremely warm weather temperatures this year, the APU has been run to ruin, causing significant lease and sale opportunities globally.”

This demand for parts is reinforced by ecube, which has seen a shift in attitude from low-fare carriers (LFCs) for disassembly as they respond to an increasing influx of passengers.

ON THE LOOKOUT

Whilst LFCs generally don’t deal directly with teardown providers, given that they



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In demand: ecube recently disassembled two Embraer E170s and has seen an uplift in enquiries for E-Jets, ATRs and Q400s. Photo: ecube

follow the sale and lease back model with their aircraft orders by selling mid-life aircraft to lessors, this has changed in the last couple of months given the need for airlines to improve their parts stock and USM.

“We’ve seen several enquiries from LFCs to disassemble small numbers of their owned aircraft, as a means to recover key components for use in their existing fleet,” says Taylor.

For regional aircraft, the demand still fluctuates.

Currently, the Saab teardown market is proving to be a fruitful one for C&L Aviation.

The company tore down a lot of Saab 340s during Covid, which left it in a strong position to support the aircraft that are still flying today.

“It’s an interesting market,” says Kilgour. “It’s just rolled back, and all the available aircraft are fine, so it puts us in good stead.”

At present, C&L Aviation is primarily focusing on its ATR teardowns. A long-term support provider for the ATR market, it recently purchased and disassembled its ninth turboprop aircraft and currently has three ATR 42-500s ready for teardown in the pipeline.

However, this is not without its challenges.

Kilgour says: “We’ve got a worldwide network searching for us, letting us know what’s available. Whilst we’re finding some aircraft, we would certainly like to have more.”

As for other regional aircraft, C&L Aviation is starting to dip its toes into purchasing older Embraer and De Havilland models for teardown.

“The E170 and E175 is new for us, and this is where we’re expanding at the moment,” says Kilgour.

“We’ve toyed with the Q400 but are yet to do anything with that. Embraer have been very popular in the secondary market. [As such] there’s currently not a lot available as teardown candidates.”

Whilst it deals primarily with narrowbody aircraft, ecube’s Taylor has also noticed an increased demand.

Ecube recently disassembled two Embraer E170 aircraft and has seen an uplift in enquiries for older E-Jets, ATRs and Q400s.

DIGITAL RECOVERY

Ongoing digitisation in the MRO industry is proving to be a massive boon for service

providers, helping companies like GA Telesis with its efficiency when it comes to asset procurement and managing teardowns.

Reed says: “We look at the business quite differently now with our digital transformation. We can easily keep pace by utilising a smart, digital process that tells us in real time what products are needed and when.

“Because the industry faces a hurdle in teardowns, the open order book, paired with age of aircraft in service, creates a simple formula for success in managing the future procurement cycle. We have always followed that blueprint, knowing that there are rainy days.”

What’s more, pausing on aircraft teardowns may not be as bad as initially thought – provided the procurement process is honed, as Reed notes.

“In our high-interest rate environment today, the turn rate is everything,” he says. “Pausing on aircraft teardowns can effectively make you a better cash flow management company simply by deciding that the hottest moving parts can net you the same gain as the entire aircraft teardown.”

On the USM side of things, APOC Aviation also attributes its success to its inventory management system for searching, sourcing, and delivering parts – Alicanto.

Wall says: “This system provides real-time tracking of parts availability and location, significantly accelerating the search process and ensuring rapid sourcing.

“Predictive analytics also play a pivotal role. We can forecast the future part requirements and establish fair market value (FMV), enabling us to proactively source the necessary parts at the right price.

“This further trims delivery times and ensures that airlines can swiftly address their needs.”

In short, the teardown market’s recovery largely hinges on ongoing OEM production output that will take a while to recover. A pressure that service providers have capacity to deal with, but still for now, it’s a tight market. ■

