Appraiser's Opinion
A330-300

Type : *Airbus A330-300*
Model : *A330-300*
Family : *A330*

Airframe Manufacturer : *Airbus Industries*
Model Launch : *JUNE 1987*

No of Engines : *02*
Engine Type - Model :
Rolls-Royce Trent 700 ; General Electric CF6-80E1 ; Pratt & Whitney PW4000-100

Seat Capacity :
Typical three class layout: 250 to 290 seats
All economy class layout: 460 seats

Weight and Payload :
242,000 Kgs Max Design Take Off Weight (MDTOW)
45,900 Kgs Max Payload Weight (MPW)

Range Capacity :
6,350 nm / 11,750 km

Other Important Features :
ADS-B, ETOPs, Wifi, SATCOM, CLS, ACT, EFB, FCRC, LDMCR, HUD, 4 Door Type A, CDSS, IFE and ESG

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Appraiser’s Opinion

Over its 25-year production span, the Airbus A330 has established itself as a key player in the medium widebody market. Launched in 1987 alongside the A340, the A330-300 variant made its first flight in November 1992, entering service in 1994. Its versatility in handling regional, long-haul, and cargo missions has solidified its role as a reliable and adaptable aircraft.

Launched alongside the A340, the A330 shares significant design similarities with its four-engine sibling, including the wing, fuselage, and flight deck, though the A330 is operated by two engines. Both the A330-200 and A330-300 are offered with three engine options: Rolls-Royce Trent 700, General Electric CF6-80E1, and Pratt & Whitney PW4000-100. The A330-300, the larger variant, comprises 60% of the fleet, while the longer-range A330-200 makes up the remaining 40%. The high degree of commonality between the A330 and A340 allows for minimal additional training when transitioning between the two, and the similar flight deck design with the A320 family supports easy cross-crew qualification.

A330-300 maximum take-off weight was enhanced to 242 metric tonnes, allowing for an extended range of 6,350 nm (11,750 km) with 277 passengers and increased payload capacity. These improvements enhanced its competitiveness, particularly against traditional rivals such as the B777-200. While newer twin-aisle aircraft offer better fuel efficiency and longer range, the A330-300 remains relevant for shorter, high-density routes due to its capacity and cost-effectiveness.

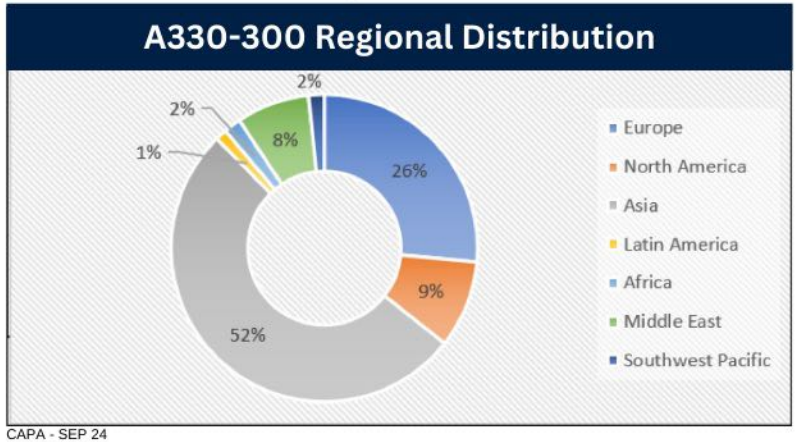
The A330-300 saw a significant rise in sales during the late 2000s and early 2010s, driven in part by delays in the Boeing 787 program. The introduction of high-gross weight (HGW) variants further boosted its popularity, allowing it to cover most of the Boeing 777-200ER’s mission profiles.

While newer aircraft like the A350 and 787 offer better fuel efficiency, the A330-300 continues to appeal to airlines for shorter, high-density routes due to its cost-effectiveness and capacity. With 776 net orders and an average fleet age of 13 years, the A330-300 maintains a strong market presence. Many airlines, continue to operate the A330-300 due to its favourable economics, particularly on routes that don't justify newer models. Cathay Pacific leads the pack with the most extensive A330-300 fleet, trailed closely by Turkish and Saudi Arabian Airlines The accompanying graph provides a visual depiction of the top 10 operators of the A330-300 fleet.

The A330-300 fleet is heavily concentrated in the Asia-Pacific region (54%), followed by Europe (26%), with the remainder distributed across the Americas, Africa, and the Middle East. This concentration has supported steady demand in Asia, but regional market saturation could lead to downward pressure on values. Ongoing support from Airbus and a robust secondary market makes it a viable option for fleet expansion or maintenance. Although production ended in 2020, the A330-300’s legacy continues through its extensive global fleet.

The A330-300 faces some market liquidity challenges due to the availability of three engine options: Rolls-Royce Trent 700, General Electric CF6-80E1, and Pratt & Whitney PW4000. With 68% of the fleet powered by the Trent 700, it offers better remarketing opportunities. However, concerns persist regarding the residual values of Trent 700 engines as they near the end of their useful life, largely due to Rolls-Royce's significant control over the aftermarket. While the company has addressed these concerns through various aftermarket and support services, investor hesitation remains.

Appraiser's Opinion (contd..)



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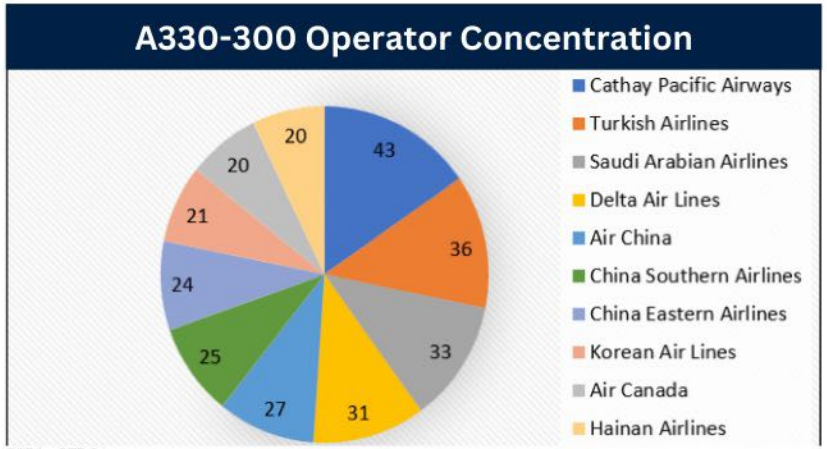
Additionally, the fragmented engine market can affect overall liquidity and market value, as operators prefer consistency in engine types to simplify maintenance and inventory management. This further reinforces the dominance of the Trent 700, but the concerns over aftermarket control continue to weigh on future resale prospects.



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Market Outlook

Airbus's introduction of the passenger-to-freighter (PTF) conversion program in 2012 has extended the operational life of older A330-300s, making them a viable option in the market. Freighter versions include converted passenger models and new-build freighters. The first converted aircraft was delivered to DHL in 2017, followed by Egyptair in 2018. A330-300 is also used in military roles, such as the MRTT+, which offers an 8% improvement in fuel efficiency.

The A330-300 remains active in the secondary market, with rising demand for widebody freighters driving more conversions. Programs like A330P2F have extended the lifespan of older passenger models, particularly as COVID-19 increased cargo capacity needs, further boosting interest in A330-300 conversions for the aircraft which are no longer profitable in passenger service. According to Airbus's Global Market Forecast 2023-2042, freighter demand is expected to reach 2,510 aircraft over the next 20 years, with around 920 being newly built. As per the Acumen database, current Airbus A330 PTF conversion costs range between $17 million and $19 million, reflecting a significant investment.

Cargo Conversions offer a cost-effective way to repurpose aging passenger aircraft, enabling owners to meet strong cargo demand while avoiding the higher costs of new-build freighters. This also helps maintain the value of older A330-300s in the secondary market. However, the upfront costs are substantial, and the growing prominence of newer, more fuel-efficient models like the A350 and 787 raises concerns about the long-term viability of these conversions. Rising operating costs and future regulatory constraints may also affect profitability. Despite these challenges, the A330-300's adaptability ensures its continued relevance in today's market.

Market Outlook (contd..)

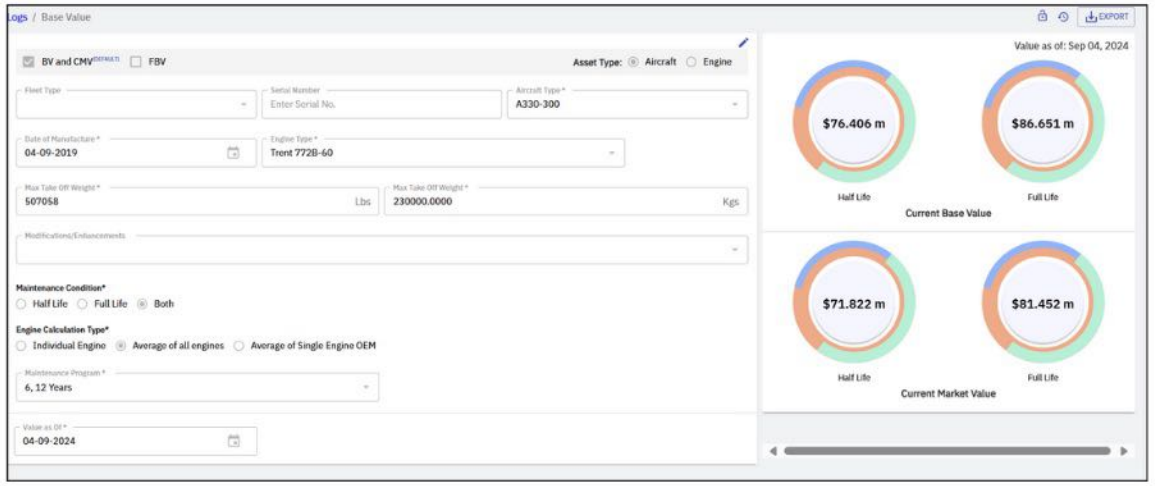
The A330-300, like many widebody aircraft, saw a significant number put into long-term storage during the COVID-19 pandemic due to the collapse in international travel. As international travel recovered, particularly on transatlantic and intra-Asia routes, airlines have reactivated these aircraft. As of September 2024, only 45 A330-300s remain in storage which is around 5.8% of fleet, highlighting its continued popularity.

Although newer models like the A350 and 787 offer better fuel efficiency, the A330-300 remains appealing, especially in the second-hand market for operators seeking fleet commonality with other Airbus models. Lease rates and values for the A330-300 have declined in recent years but have stabilized with the post-pandemic recovery in widebody aircraft demand. The balance of supply and demand in the used aircraft market, combined with rising long-haul passenger demand, is positively influencing the A330-300's prospects. Gradual improvements over its lifecycle have made the A330-300 a preferred model for many airlines. As the A330 family continues to evolve, it remains popular with both first- and second-tier operators globally. The A330-300 is expected to remain a reliable medium widebody workhorse for years to come, albeit at lower values and lease rates compared to newer-technology aircraft.

Value Projection

Source : fin-S Online Valuation Application - SPARTA

A330-300 - Acumen Values as of 1st Jan 2024															
Year of build	Current market value	Current base value	Future Base Values at 0% inflation												
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2020	73.6553	77.5319	77.5319	71.98	67.07	62.45	58.00	53.83	49.83	46.06	42.46	39.04	35.76	32.64	29.68
2019	70.0756	74.5485	74.5485	69.46	64.67	60.07	55.75	51.60	47.70	43.98	40.43	37.04	33.81	30.73	27.81
2018	65.6944	70.6392	70.6392	65.77	61.09	56.69	52.48	48.51	44.72	41.11	37.67	34.38	31.25	28.29	25.47
2017	60.2421	65.4806	65.4806	60.82	56.45	52.25	48.30	44.53	40.93	37.50	34.23	31.12	28.16	25.36	22.72
2016	55.6366	60.8050	60.8050	56.43	52.23	48.29	44.51	40.92	37.49	34.22	31.11	28.15	25.35	22.71	20.22
2015	51.0810	56.1330	56.1330	51.96	48.03	44.28	40.71	37.29	34.04	30.95	28.01	25.22	22.59	20.11	17.78
2013	43.5416	48.3795	48.3795	44.60	41.00	37.56	34.29	31.17	28.21	25.40	22.75	20.25	17.91	15.71	13.66
2011	36.4423	40.9464	40.9464	37.51	34.24	31.13	28.17	25.37	22.72	20.23	17.88	15.69	13.64	11.73	9.96
2008	27.6950	32.2034	32.2034	29.14	26.25	23.51	20.93	18.50	16.23	14.11	12.13	10.30	8.74		
2005	20.8017	24.1880	24.1880	21.53	19.04	16.70	14.52	12.49	10.60	9.00					
2002	15.2759	17.9716	17.9716	15.62	13.44	11.40	9.68								
1999	11.3491	13.3519	13.3519	11.33											



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