



CIVIL AVIATION SOUTH EAST ASIA SUMMIT IN NOV 2024

Financing for MRO and Airlines in South East Asia Region

Presenter: Trinh Quoc Cuong

Commercial Director

Vietstar Aero Engineering Company



Vietstar Airlines Multirole Company

- **☐** Vietstar Airlines
- Commercial Aviation
- Private Aircraft operating (Legacy 600/650, King Air B350)
- Helicopter Charter Flight
- Charter Flights
- Ground Handling
- Lands in 3 major airports (Noi Bai 48 ha, Da Nang 89 ha, Tan Son Nhat 20 ha, Can Tho 31 ha)
- **☐** Vietstar Express
- ☐ Vietstar Aero Engineering Co, an integrated MRO in Vietnam, has capability as follows:
- Up to C3 check for A320/A321
- Line maintenance and ad hoc support, structure repair
- Engineering and Maintenance Planning Support, Continuing Airworthiness Program, GSE services, Workshop support

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Vietstar Aero Engineering

- **☐** Overview of Airlines performance
- **☐** Overview of MRO industry
- **☐** MRO financing
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Overview of Airlines Performance Viel

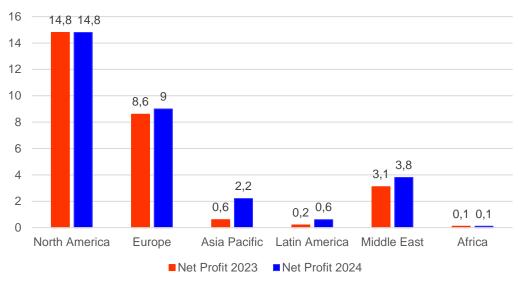


- Net profits are expected to reach \$30.5 billion in 2024 (3.1% net profit margin). While 2023 net profits are estimated to be \$27.4 billion (3.0% net profit margin). It is also an improvement on the \$25.7 billion (2.7% net profit margin) forecast for 2024 profits that IATA released in December 2023.
- Return on invested capital in 2024 is expected to be 5.7%, which is about 3.4 percentage points (ppt) below the average cost of capital.
- Operating profits are expected to reach \$59.9 billion in 2024, up from an estimated \$52.2 billion in 2023.
- Total revenues are expected to reach \$996 billion (+9.7%) in 2024—a record high.
- Total expenses are expected to reach \$936 billion (+9.4%) in 2024—a record high.
- Total travelers are expected to reach 4.96 billion in 2024—a record high.
- Total air cargo volumes are expected to reach 62 million tonnes in 2024.

Overview of Airlines Performance Wiet







Growth of Demand and Capacity in 2024

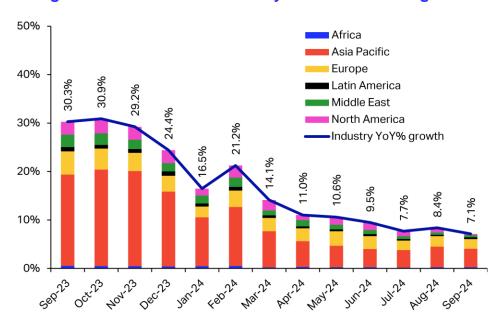


Source: IATA Demand (RPK) 2024 Capacity (ASK) 2024

Overview of Airlines Performance Wiets



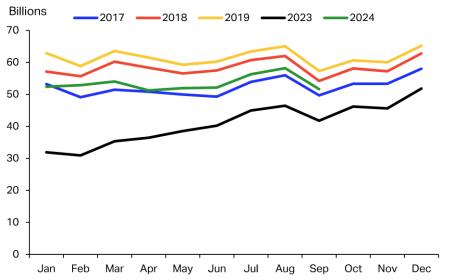
Regional contribution to industry annual total RPK growth

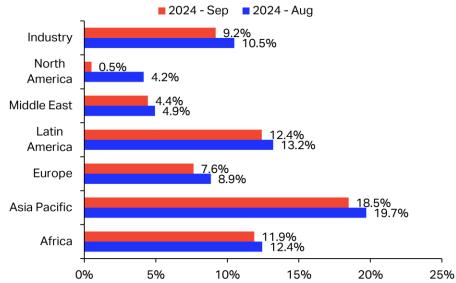


Source: IATA

International RPK, Within Asia route area

International RPK growth by airline region of registration, YoY%





Overview of Airlines Performance View



REVENUE 2024 996 billions of USD

EXPENSES 2024 936 billion of USD

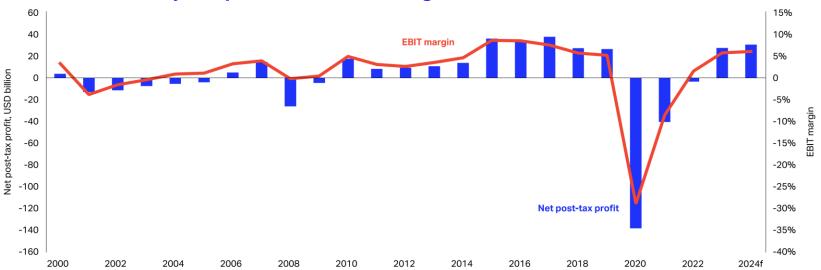
OPERATING PROFIT 2024 59.9 billion of USD

- □ Non fuel expenses 39 cents per ATK in 2024 and 2023 **!** 39.2 cents per ATK in 2019
- ☐ Fuel \$113.8/barrel in 2024, fuel costs of \$291 billions (31%) of operating costs) 1 7.4% YoY
- □ SAF production 0.53% of global demand for fuel in 2024, the costs of SAF \$3.75 billions Source: IATA

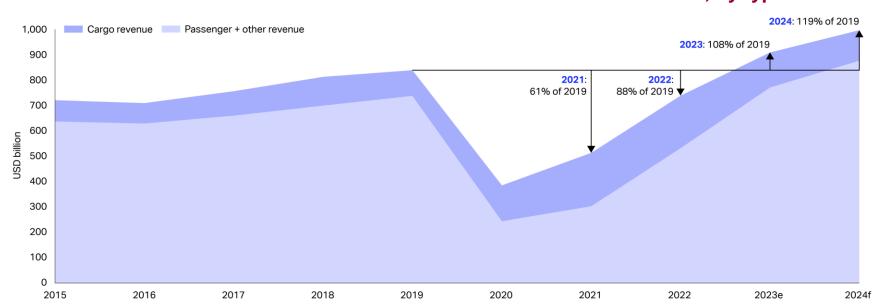
Overview of Airlines Performance Viet



Airline industry bet profits and EBIT margin



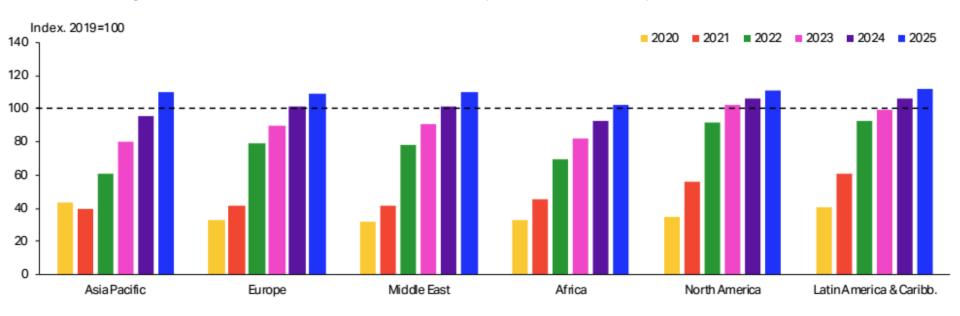
Global airlines revenues, by type



Overview of Airlines Performance Viet



Passenger traffic forecast and estimated year of recovery to 2019 levels



Estimated year of recovery to 2019 passenger traffic levels

Africa	Asia Pacific	Europe	Latin America & Caribbean	Middle East	North America	World
2025	2025	2024	2024	2024	2023	2024

Overview of Airlines Performance Vietstar



Key Industry Labor Metrics

Global airline industry	2019	2020	2021	2022	2023e	2024f
Labor costs, USD billion	189	160	162	180	199	214
% YoY	3.6%	-15.2%	0.9%	11.3%	10.2%	7.6%
Employment, million	2.93	2.56	2.67	2.80	2.97	3.07
% YoY	0.3%	-12.6%	4.0%	5.0%	6.0%	3.5%
Productivity, ATK/employee	526,003	335,264	374,761	436,267	505,329	538,257
% YoY	2.8%	-36.3%	11.8%	16.4%	15.8%	6.5%
Unit labor costs, USD/ATK	0.123	0.187	0.162	0.148	0.132	0.129
% YoY	0.5%	52.2%	-13.2%	-8.9%	-10.2%	-2.4%

Fuel

Global airline industry	2019	2020	2021	2022	2023e	2024f
Fuel spend, USD billion	190	80	106	215	271	291
% YoY	1.2%	-58.0%	32.2%	103.6%	25.9%	7.4%
% opex	23.9%	16.1%	19.0%	29.6%	31.6%	31.1%
Fuel use, billion gallons	96	52	62	77	92	99
% YoY	2.2%	-45.9%	19.9%	22.9%	20.3%	7.5%
Fuel efficiency, gallons/100 ATK	6.2	6.0	6.2	6.3	6.1	6.0
% YoY	-0.8%	-3.0%	3.2%	0.5%	-2.0%	-2.5%
Fuel price, USD/barrel	80	47	78	136	112	114
% YoY	-7.4%	-41.5%	67.0%	74.3%	-17.3%	1.4%
% spread over oil price	22.6%	11.6%	10.1%	35.0%	36.0%	30.0%

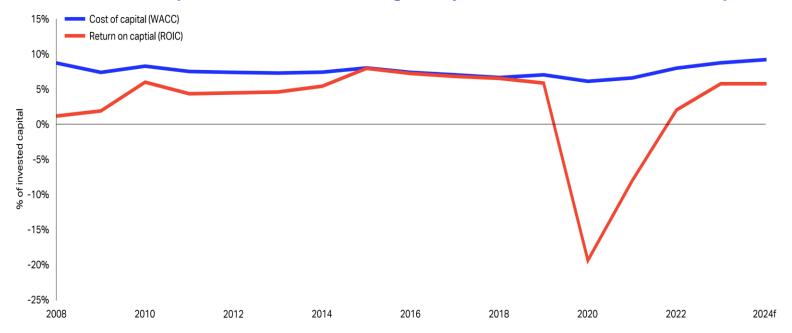
Overview of Airlines Performance Wiets



Key forecasts and assumptions

	ROIC	EBIT	Not Profite	Evpopoo	Passenger	RPK	СТК	World GDP	Passenger Yield
		margin	Net Profits	Expenses	S	KFK	CIK	World GDP	rieiu
	% invested								
	capital	% revenue	USD billion	USD billion	Million	Billion	Billion	%YoY	%YoY
2019	5.8%	5.2%	26.4	795	4,543	8,688	254	2.5%	-3.7%
2020	-19.3%	-29.0%	-137.7	495	1,757	2,974	229	-3.5%	-9.1%
2021	-8%	-8.5%	-40.4	556	2,291	3,623	272	6.3%	5%
2022	2%	1.5%	-3.5	727	3,486	5,973	250	3.5%	9.7%
2023e	5.7%	5.7%	27.4	856	4,497	8,160	246	3.2%	8.1%
2024f	5.7%	6%	30.5	936	4,964	9,108	258	3.2%	3.2%

Return on capital invested in airlines globally, 2008-2024f, % of invested capital





FLEET FORECAST SUMMARY

		Middle	Asia			Latin	North	Eastern		Western	
Region	Africa	East	Pacific	China	India	America	America	Europe	Russia	Europe	World
2024 Fleet											
Narrowbody	491	587	2,263	3,422	452	1,131	4,713	416	327	3,462	17,264
Widebody	188	818	1,362	488	65	170	1,440	40	57	1,129	5,757
Regional jet	179	45	215	215	7	246	1,509	86	189	352	3,043
Turboprop	281	22	687	1	86	213	569	82	20	373	2,334
TOTAL	1,139	1,472	4,527	4,126	610	1,760	8,231	624	593	5,316	28,398
2034 Fleet											
Narrowbody	625	1,056	2,468	4,847	1,253	1,508	6,186	904	184	3,945	22,976
Widebody	254	1,099	1,659	725	137	218	1,831	95	41	1,343	7,402
Regional jet	231	53	264	645	16	250	1,276	121	322	290	3,468
Turboprop	319	19	762	212	139	158	557	105	1	295	2,567
TOTAL	1,429	2,227	5,153	6,429	1,545	2,134	9,850	1,225	548	5,873	36,413
Fleet growt	h rates										
2024-2029	1.9%	6.1%	1.7%	3.9%	12.7%	-0.7%	2.0%	9.2%	-7.9%	0.8%	2.4%
2029-2034	2.7%	2.4%	0.9%	5.2%	6.9%	4.7%	1.6%	4.8%	6.9%	1.2%	2.7%
2024-2034	2.3%	4.2%	1.3%	4.5%	9.7%	1.9%	1.8%	7.0%	-0.8%	1.0%	2.5%

Vietstar Aero Engineering

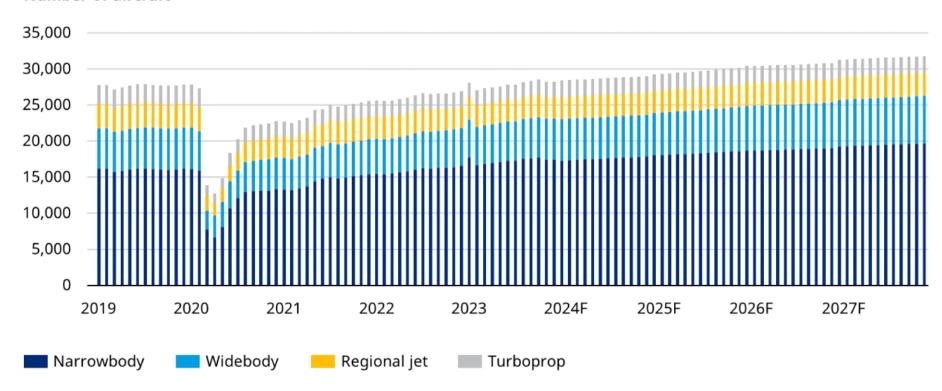
MRO FORECAST SUMMARY

		Middle	Asia			Latin	North	Eastern		Western	
Region	Africa	East	Pacific	China	India	America	America	Europe	Russia	Europe	World
2024 MRO (U	S\$ in bil	lions)									
Airframe	\$0.8	\$1.6	\$3.8	\$3.1	\$0.2	\$1.2	\$5.2	\$0.4	\$0.3	\$3.9	\$20.5
Engine	\$1.7	\$8.5	\$10.6	\$4.7	\$0.7	\$2.7	\$10.2	\$0.7	\$0.3	\$9.7	\$49.8
Component	\$0.7	\$1.5	\$3.3	\$2.7	\$0.4	\$1.1	\$5.2	\$0.4	\$0.4	\$4.0	\$19.7
Line	\$0.3	\$0.9	\$2.2	\$1.8	\$0.3	\$0.7	\$3.5	\$0.3	\$0.3	\$3.6	\$13.9
TOTAL	\$3.5	\$12.5	\$19.9	\$12.3	\$1.6	\$5.7	\$24.1	\$1.8	\$1.3	\$21.2	\$103.9
2034 MRO (U	S\$ in bil	lions)									
Airframe	\$0.8	\$1.8	\$3.5	\$3.3	\$0.7	\$1.4	\$5.7	\$0.7	\$0.3	\$3.6	\$21.7
Engine	\$2.5	\$10.7	\$11.4	\$5.6	\$2.8	\$3.3	\$14.2	\$1.5	\$0.8	\$9.8	\$62.6
Component	\$0.9	\$1.9	\$3.5	\$3.4	\$0.9	\$1.4	\$5.7	\$0.7	\$0.3	\$3.8	\$22.3
Line	\$0.4	\$1.3	\$2.5	\$2.8	\$0.6	\$0.9	\$4.3	\$0.6	\$0.3	\$3.9	\$17.5
TOTAL	\$4.6	\$15.7	\$20.9	\$15.1	\$5.0	\$7.0	\$29.9	\$3.5	\$1.7	\$21.1	\$124.1
MRO growth	rates										
2024-2029	1.6%	2.0%	0.7%	5.4%	11.9%	0.5%	1.9%	8.7%	-2.6%	2.2%	2.4%
2029-2034	3.9%	2.6%	0.2%	-1.4%	12.3%	3.2%	2.5%	5.9%	7.2%	-2.1%	1.2%
2024-2034	2.7%	2.3%	0.4%	2.0%	12.1%	1.8%	2.2%	7.3%	2.2%	0.0%	1.8%



Monthly in service fleet, 2019 - 2027

Number of aircraft

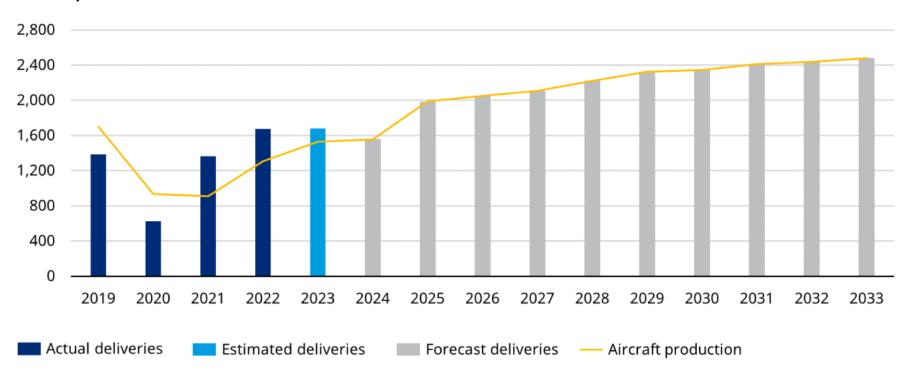


Source: Oliver Wyman, Aviation Week



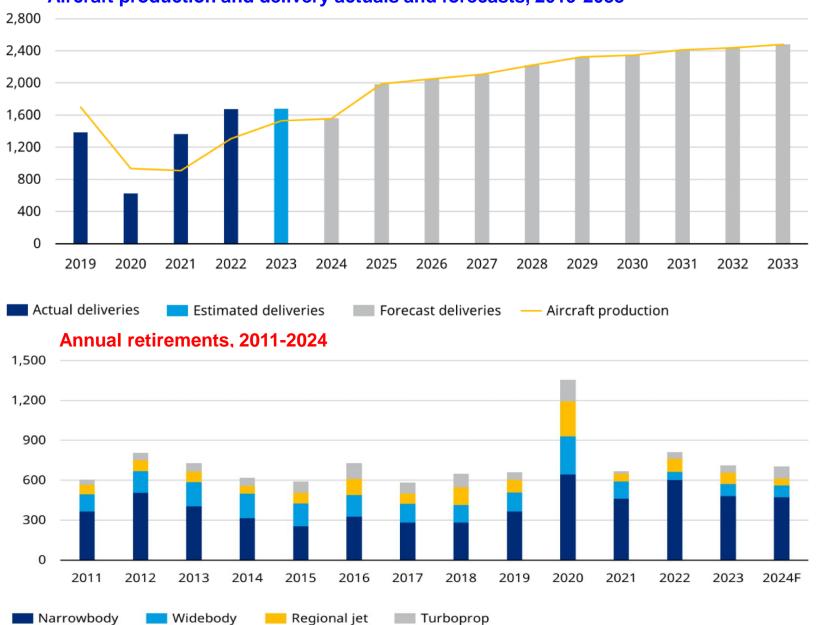
Aircraft production and delivery actuals and forecast, 2019-2033

Annual production and deliveries



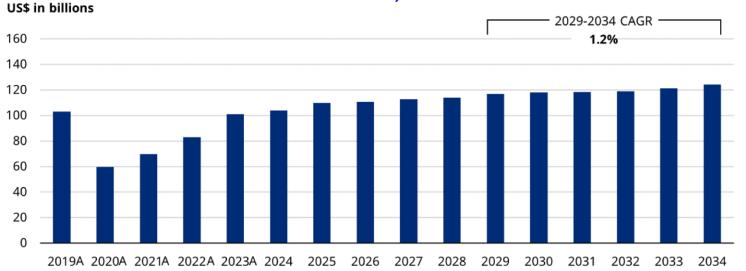


Aircraft production and delivery actuals and forecasts, 2019-2033



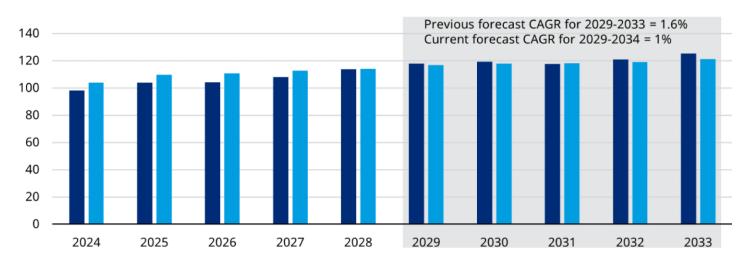


MRO market forecast, 2019-2024



Total MRO demand





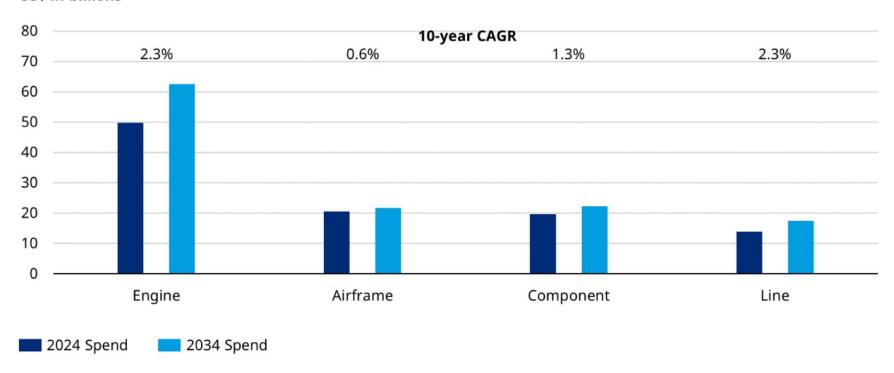
Previous forecast 2023-2033

Current forecast 2024-2034



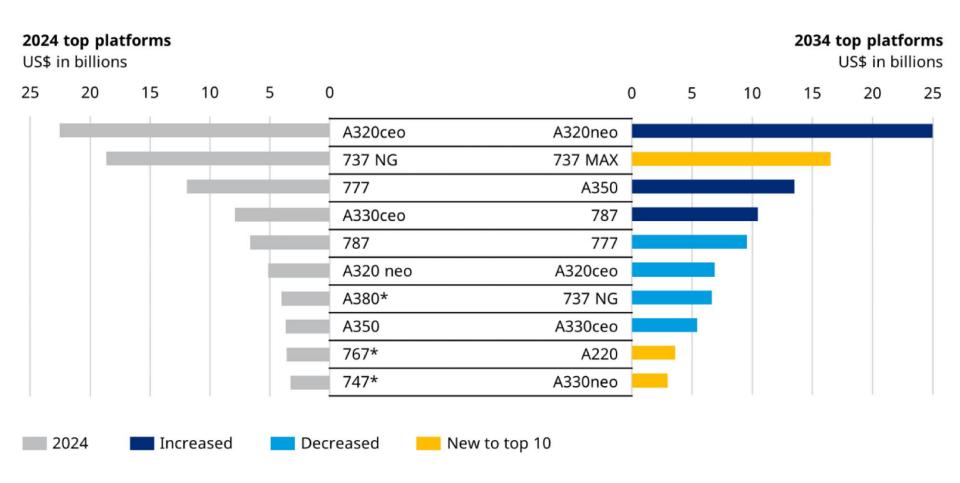
Total MRO demand forecast by segment, 2024 and 2034

US\$ in billions





Top aircraft platforms by total MRO spend, 2024 actual versus 2034 projections



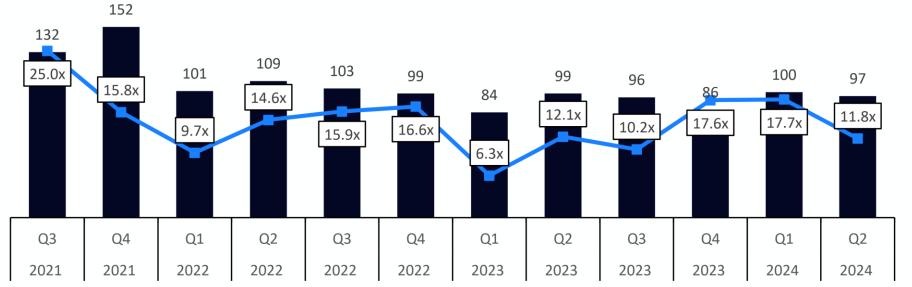
MRO & Airlines Financing

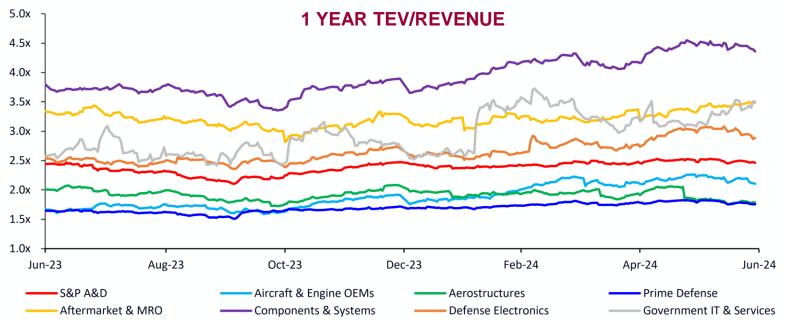


- 1. Capital reserves
- 2. Getting a bank loan, issuing bonds
- 3. Issuing shares
- 4. Private equity
- 5. M&A
- 6. Divest inefficient projects
- 7. Investment from mother companies



M&A DEAL VOLUME IN AEROSPACE & DEFENSE & TEV/EBITDA VALUATION





Source: Objective Investment Banking & Valuation



CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (OCT 2009 – OCT 2024)



INDEX PERFORMANCE - NET RETURNS (%) (OCT 31, 2024)

FUNDAMENTALS (OCT 31, 2024)

							NUALIZED					
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	¹⁰ Yr _D	Since ec 30, 1994	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI World Aero and Defense	-3.14	0.72	35.31	18.85	15.50	7.56	11.33	11.45	1.51	35.03	23.93	6.53
MSCI World	-1.98	2.45	33.68	16.50	6.38	12.03	9.78	7.98	1.78	22.35	18.76	3.45

Source: MSCI



Public Aerospace Companies

Aerospace & Defense Industry	3 Q	2 Q	1 Q		4 Q	3 Q
Financial Strength	2024	2024	2024	;	2023	2023
Quick Ratio (TTM)	0.16	0.18	0.19		0.19	0.2
Working Capital Ratio (TTM)	1.22	1.28	1.28		1.29	1.31
Working Capital Per Revenue	0.13	0.16	0.16		0.17	0.17
Leverage Ratio (TTM)	5.98	6.21	6.27		6.19	5.47
Total Debt to Equity (TTM)	2.32	2.63	2.63		2.51	2.36
Interest Coverage (TTM)	10.33	6.24	5.12		4.96	6.24
Debt Coverage (TTM)	0.14	0.19	0.19		0.17	0.19
Aerospace & Defense Industr	y	3 Q	2 Q	1 Q	4 Q	3 Q
Revenues		2024	2024	2024	FY 2023	2023
Y / Y Revenue Quarterly Growth	า	2.25%	1.74%	4.78%	7.88%	9.47%
Seq. Revenue Quarterly Growth	า	-0.48%	3.04%	-12.44%	13.81%	-1.30%
Y / Y Revenue Annual Growth (Fiscal Year)				11.51%		
Y / Y Revenue Growth (Annual Ending)	3.82%	7.50%	9.78%	11.51%	11.98%	
Seq. Revenue Growth (Annual Ending)	by Quarter	0.53%	0.47%	1.12%	2.46%	2.17%

Source: cismarket.com

Vietstar Aero Engineering

Public Aerospace Companies

Aerospace & Defense Industry	3 Q 2024	2 Q 2024	1 Q 2024	4 Q 202	3 3 Q 2	023
Profitability Ratios	2024	2024	2024	202	3 2	023
Gross Margin	10.96%	20.56%	21.51%	16.04%	6 20.1	16%
Gross Margin Annual (TTM)	15.91%	19.46%	19.50%	20.23%	6 22.7	70%
EBITDA Margin	9.40%	10.16%	7.91%	6 9.9	96%	
EBITDA Margin Annual (TTM)	6.52%	9.66%	9.45%	8.67%	6 9.7	78%
Operating Margin	-	7.32%	8.53%	1.90%	6 7.7	72%
Operating Margin Annual (TTM)	3.35%	6.34%	6.57%	7.07%	6 10.5	50%
Pre-Tax Margin	-	5.15%	5.67%	4.20%	6 5.7	77%
Pre-Tax Margin Annual (TTM)	2.72%	5.26%	5.63%	5.25%	6.3	37%
Net Margin	-	3.88%	5.24%	4.13%	% 3.8	30%
Net Margin Annual (TTM)	1.97%	4.34%	4.82%	4.35%	6 5.0)8%
Aerospace & Defense Industry		3 Q	2 Q	1 Q	4 Q	3 C
Free Cash Flow Growth		2024	2024	2024	FY 2023	2023
Y / Y Free Cash Flow Quarterly G	Growth	-37.93%	-87.35%	-	30.43%	-36.87%
Seq. Free Cash Flow Quarterly G	Growth	442.74%	, -	-	93.86%	-9.13%
Y / Y Free Cash Flow Annual Gro Year)				29.94%		
Y / Y Free Cash Flow Growth (An	nnual by Quarter Ending)	-27.47%	-22.78%	6.83%	29.94%	32.52%
Seq. Free Cash Flow Growth (An	nual by Quarter Ending)	-8.93%	-17.34%	-9.77%	6.05%	-8.69%

Source: cismarket.com



Public Aerospace Companies

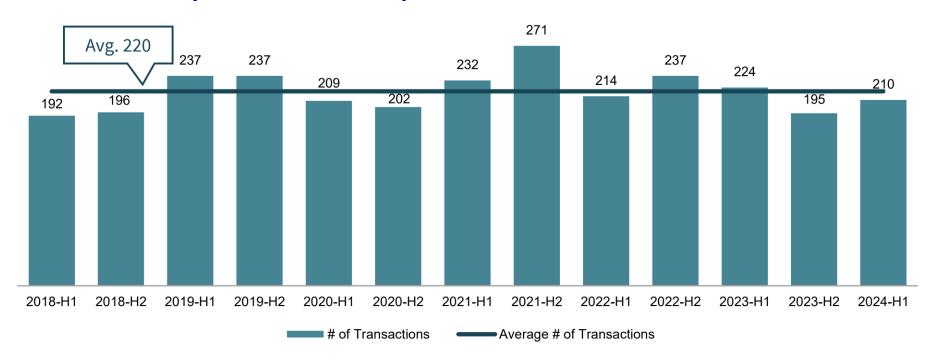
Aerospace & Defense Industry	3 Q	2 Q	1 Q	4 Q	3 Q
Management Effectiveness	2024	2024	2024	2023	2023
Return On Assets (TTM)	1.46%	3.09%	3.46%	3.05%	3.59%
Return On Investment (TTM)	2.59%	5.21%	5.82%	5.21%	5.97%
Return On Equity (TTM)	10.17%	22.30%	25.12%	21.96%	23.21%

Aerospace & Defense Industry	3 Q	2 Q	1 Q	4 Q	3 Q
Efficiency	2024	2024	2024	2023	2023
Revenue/Employee (TTM) \$	451,505	443,276	441,791	434,331	420,027
Net Income/Employee (TTM) \$	8,916	19,228	21,290	18,910	21,341
Receivable Turnover Ratio (TTM)	9.96	9.52	9.53	8.86	9.22
Inventory Turnover Ratio (TTM) Sales	2.52	2.6	2.63	2.67	2.59
Inventory Turnover Ratio (TTM) COS	2.12	2.09	2.12	2.09	1.92
Asset Turnover Ratio (TTM)	0.74	0.71	0.72	0.7	0.71

Source: cismarket.com



Aerospace, Defense & Space M&A Transaction Volume



MRO Financing Notable Transactions in Aerospace, Defense, and Space



<u>Target</u>	Acquirer/Investor	Target Description
unications		
PAR Government	Booz Allen Hamilton (NYS: BAH)	The company offers tactical assault programs, team awareness kit integrated systems engineering, and operational support to the global information networks.
Fenix Group	Nokia (HEL: NOKIA)	Provider of system-integrated infrastructure services by providing battlefield intelligence at the edge.
Get SAT	Thales Group (PAR: HO)	Developer of micronized satellite terminals designed to provide satellite communication for ground, air, and maritime applications.
Triad RF Systems	Comrod Communication	Manufacturer of RF, microwave amplifiers and integrated radio systems for challenging environments.
BOWEN	Exens Solutions	Manufacturer of high-tech electronic equipment for industrial systems.
nics / Engineered Systems		
CAES	Honeywell (NAS: HON)	Manufacturer of advanced electronics including antennas, missile flight instrumentation, precision positioning systems, RF assemblies and subsystems, RF microwaves and components.
Micro-Precision Technologies	Great River Capital	Manufacturer of hybrid integrated circuits and modules catering to the military, aviation, industrial, medical and commercial applications.
CPI International (Electron Device Business)	TransDigm Group (NYS: TDG)	Manufacturer of electronic components and subsystems primarily serving the aerospace and defense market.
Raptor Scientific	TransDigm Group (NYS: TDG)	Manufacturer of engineering, testing, and measurement products intended for aerospace, defense, space, marine, and other markets.
Cobham Aerospace Communications	Thales Group (PAR: HO)	Manufacturer of radio management, antennas, lights and clocks for commercial aerospace, defense and security sectors.
PLX	Edgewater Capital Partners	Manufacturer of advanced optical technologies for military, aerospace, scientific, industrial and commercial industrial applications.
Mission Microwave	J.F. Lehman & Company	Manufacturer of the solid-state power amplifier and block up-converter products intended to support ground-based, airborne, and space-based applications.
Charles E. Gillman	Behrman Capital	Provider of high-reliability electrical cables and harnesses intended for military ground vehicles and other ruggedized applications.
Flex Force Enterprises	High Point Aerotechnologies	Manufacturer and provider of stabilization products and technologies intended for law enforcement agencies, military organizations, and private security companies globally.
Space & Mission Systems	BAE Systems (LON: BA.)	Manufacturer of aerospace systems including space-based instruments and sensors, tactical electro-optical solutions, antennas, microwave systems, and aerospace components.
KeTech Defence	Sun Capital Partners	Manufacturer of alarm and detection systems intended to serve the defense sector.
Vian Enterprises	Crane (NYS: CR)	Designer and manufacturer of multi-stage lubrication pumps and lubrication system components technology for critical aerospace and defense applications.
ng / Surface Treatment		
Aqua Blasting	Metal Finishing Technologies	The company offers shot peening, glass bead peening, wet abrasive peening, dry abrasive peening, soda blasting, tumbling, and surface finish testing.
FGP Systems	Rcapital Partners	The company provides heat treatment, surface coating, assembly, inspection, and an array of automated machine solutions and product control services.
Lake City Heat Treating	Bodycote (LON: BOY)	The company offers vacuum heat treating, cryogenic and tempering services for stainless steels, cobalt and nickel alloys and vacuum heat treatable steels as well as hot isostatic pressing services.
	PAR Government Fenix Group Get SAT Triad RF Systems BOWEN Inics / Engineered Systems CAES Micro-Precision Technologies CPI International (Electron Device Business) Raptor Scientific Cobham Aerospace Communications PLX Mission Microwave Charles E. Gillman Flex Force Enterprises Space & Mission Systems KeTech Defence Vian Enterprises Ing / Surface Treatment Aqua Blasting FGP Systems	PAR Government Fenix Group Nokia (HEL: NOKIA) Get SAT Thales Group (PAR: HO) Triad RF Systems Comrod Communication Exens Solutions Micro-Precision Technologies CPI International (Electron Device Business) Raptor Scientific TransDigm Group (NYS: TDG) Cobham Aerospace Communications PLX Edgewater Capital Partners Mission Microwave J.F. Lehman & Company Charles E. Gillman Behrman Capital Flex Force Enterprises High Point Aerotechnologies Space & Mission Systems KeTech Defence Vian Enterprises Crane (NYS: CR) Metal Finishing Technologies Rapital Partners Rapital Partners

Source: Meridian Capital Investment Bankers





Deal Date	<u>Target</u>	Acquirer/Investor	Target Description					
MRO /	MRO / Aftermarket							
Jun-24	Aerospace Products International	AeroMed Group	Distributor of aviation parts and equipment including paint, chemicals, and consumables.					
Jun-24	Aerodyne Corporation	Sky Aviation Holdings	The company offers cylinder repair, aircraft inspections, and engine overhauls for jet engines.					
May-24	Sunvair Aerospace Group	Greenbriar Equity Group	Provider of landing gear overhaul services intended for commercial, regional and military aircraft.					
May-24	HYDRO Systems	Rhinestahl	Manufacturer and supplier of ground support equipment and maintenance tooling for aircraft or engines catering to the aviation industry.					
May-24	Aviocraft	Salt River Aviation	Provider of maintenance, repair, and overhaul services catering to the aviation industry.					
May-24	GT Engine Services	STS Aviation Group	Provider of jet engine care and maintenance services catering to airlines, aviation companies and aircraft leasing firms.					
Apr-24	Turbine Controls	VSE (NAS: VSEC)	Provider of aftermarket maintenance, repair and overhaul support services catering to complex aircraft engine components of commercial and military applications.					
Apr-24	Segers Aerospace Corporation	H.I.G. Capital	Provider of MRO services intended for mission-critical military platforms.					
Apr-24	Alpha Aircraft Services	Ventura Air Services	Provider of maintenance services for aircraft					
Mar-24	Mid-Continent Aviation Services	Yingling Aviation	Provider of maintenance, repair, and overhaul services to business and general aviation.					
Mar-24	Triumph Group (Product Support Business)	AAR (NYS: AIR)	Provider of maintenance, repair and overhaul of structures-related services.					
Feb-24	AOG Accessories	Aero Accessories	Provider of aircraft repair services for galley equipment and interior parts.					
Feb-24	Britt Metal Processing	Jets MRO	The company offers in-house engineered APU component repair and maintenance services.					
Feb-24	Arista Aviation Services	United Aero Group	Specializes in the rebuild, upgrade and recertification of helicopter airframes and avionics.					
Feb-24	BP Aerospace	ITP Aero	Provider of aircraft engine aftermarket services intended to serve airlines, engine overhaul shops, leasing companies, and parts traders.					
Jan-24	Arrow Aviation Services	Hartzell Aviation	Distributor of aircraft spare parts, lubricants, and ground support equipment.					





Deal Date	<u>Target</u>	Acquirer/Investor	Target Description
Precisi	ion Components		
Jun-24	Sesco Industries	Hillside Custom	Manufacturer of socket set screws, aerospace parts, custom fasteners, commercial fasteners, machine screws, and other related products.
Jun-24	RTI Advanced Forming	Accrofab	Manufacturer of titanium products intended for the aerospace and defense industries.
May-24	Llamas Plastics	Lee Aerospace, Inc.	Manufacturer of aircraft parts, components, and equipment serving to defense sector.
Apr-24	Trinity Aerospace	Johnson Precision Products	Manufacturer of aviation and aerospace components intended to serve the aerospace industries.
Apr-24	Cablenet Aerospace	Tide Rock	Provider of contract manufacturing services for aerospace, aircraft, military, and medical sectors.
Mar-24	ERW	Akoya Capital	Provider of sheet metal fabrication and machined products intended for industrial gas turbine, aerospace, and mass transit industries.
Feb-24	Radial Bearing	AFM Capital Partners	Manufacturer and designer of rod ends and spherical bearings intended for industrial and aerospace applications.
Jan-24	Merrill Technologies Group	Keel Holdings	Manufactures products from complex fabrications and precision machining of components for aviation, defense, heavy equipment, energy, robotics and machine tool industries.
Jan-24	AeroCision	Verus Aerospace	Manufacturer of engine components and assemblies intended for the aerospace industry.
Profess	sional Services		
May-24	M1 Support Services	Cerberus Capital Management	The company offers logistics, information technology, training services, supply chain management, acquisition, and facilities and equipment maintenance services.
May-24 Apr-24	M1 Support Services Special Aerospace Services	Cerberus Capital Management Godspeed Capital	
•		, ,	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision
Apr-24	Special Aerospace Services	Godspeed Capital	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support.
Apr-24 Mar-24	Special Aerospace Services Flight Crews Unlimited ManTech International	Godspeed Capital Reliance Aerotech Services	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals.
Apr-24 Mar-24 Mar-24	Special Aerospace Services Flight Crews Unlimited ManTech International (Technical Advisory Programs)	Godspeed Capital Reliance Aerotech Services Arlington Capital Partners	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals. Provider of defense, intelligence and technical advisory service programs. Provider of aerospace engineering services intended to serve the missile defense agency, national air and space
Apr-24 Mar-24 Mar-24 Mar-24	Special Aerospace Services Flight Crews Unlimited ManTech International (Technical Advisory Programs) Synectic Research and Analysis	Godspeed Capital Reliance Aerotech Services Arlington Capital Partners Avion Solutions	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals. Provider of defense, intelligence and technical advisory service programs. Provider of aerospace engineering services intended to serve the missile defense agency, national air and space intelligence center, and space and missile defense command. Provider of distribution and supply chain management services intended for engine and airframe manufacturers and
Apr-24 Mar-24 Mar-24 Mar-24 Feb-24	Special Aerospace Services Flight Crews Unlimited ManTech International (Technical Advisory Programs) Synectic Research and Analysis Incora	Godspeed Capital Reliance Aerotech Services Arlington Capital Partners Avion Solutions Allianz Group	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals. Provider of defense, intelligence and technical advisory service programs. Provider of aerospace engineering services intended to serve the missile defense agency, national air and space intelligence center, and space and missile defense command. Provider of distribution and supply chain management services intended for engine and airframe manufacturers and companies.
Apr-24 Mar-24 Mar-24 Mar-24 Feb-24	Special Aerospace Services Flight Crews Unlimited ManTech International (Technical Advisory Programs) Synectic Research and Analysis Incora Global Training Aviation	Godspeed Capital Reliance Aerotech Services Arlington Capital Partners Avion Solutions Allianz Group Indra Sistemas	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals. Provider of defense, intelligence and technical advisory service programs. Provider of aerospace engineering services intended to serve the missile defense agency, national air and space intelligence center, and space and missile defense command. Provider of distribution and supply chain management services intended for engine and airframe manufacturers and companies. Provider of aviation training services intended to deliver innovative training and resourcing to aeronautical professionals.
Apr-24 Mar-24 Mar-24 Mar-24 Feb-24 Feb-24	Special Aerospace Services Flight Crews Unlimited ManTech International (Technical Advisory Programs) Synectic Research and Analysis Incora Global Training Aviation	Godspeed Capital Reliance Aerotech Services Arlington Capital Partners Avion Solutions Allianz Group Indra Sistemas	facilities and equipment maintenance services. The company provides strategic advisory and business capture, tactical engineering, systems development, precision manufacturing, and recurring program support. Operator of an aviation staffing company intended to serve aviation professionals. Provider of defense, intelligence and technical advisory service programs. Provider of aerospace engineering services intended to serve the missile defense agency, national air and space intelligence center, and space and missile defense command. Provider of distribution and supply chain management services intended for engine and airframe manufacturers and companies. Provider of aviation training services intended to deliver innovative training and resourcing to aeronautical professionals.

Airlines Financing M&A Deal for Airlines from 01 Jan to 13 Nov 2024



		MAA Deal Tol	All lilles it offi of	Jan to 13	140V 2024		Aero Engineer
No.	Published Date	Acquired Company	Acquiring Company	Deal Value	M&A Type	M&A Status	Valuation
1	11/13/2024	AGS Airports	AviAlliance	£1.53 billion	Full Acquisition	Pending (Expected to close by Q1 2025)	£1.53 billion
2	11/13/2024	<u>Vistara</u>	Tata Group and Singapore Airlines	-	Merger	Ongoing discussions	-
3	11/12/2024	<u>Vistara</u>	Air India Group	-	Merger	Completed	-
4	11/12/2024	Testek Solutions	Branford Castle Partners	-	Full Acquisition	Completed	-
5	11/12/2024	Air India, Vistara	Tata Group, Singapore Airlines	-	Merger	Completed	-
6	11/12/2024	<u>Vistara</u>	<u>IndiGo</u>	-	Full Acquisition	Completed	-
7	11/11/2024	Club Vistara	Air India Flying Returns	-	Merger	Completed	-
8	11/10/2024	Air Transport Services Group (ATSG)	Parent Company	-	Merger	Pending	\$24.25
9	11/9/2024	Pakistan International Airlines (PIA)	Al-Nihang	INR 100 billion	Full Acquisition	Pending	Rs 85 billion
10	11/9/2024	<u>Vistara Airline</u>	Air India	-	Merger	Completed	-
11	11/8/2024	Vistara Ltd.	Air India Ltd.	-	Merger	Pending	-
12	11/7/2024	Pakistan International Airlines (PIA)	Al Nahang	-	Full Acquisition	Proposed	-
13	11/6/2024	Turkish Technic	SunExpress	-	Merger	Ongoing	-
14	11/6/2024	<u>ATSG</u>	Stonepeak	US\$3.1 billion	Full Acquisition	Pending	-
15	11/6/2024	K-Mile Air	TP Aerospace	-	Asset / Business Division Sale	Ongoing	-
16	11/5/2024	SunExpress Airlines	Turkish Technic	-	Asset / Business Division Sale	Active	-
17	11/5/2024	Avionics Support Group	Maxposure Limited	-	Merger	Active	-
18	11/5/2024	Nordic Aviation Capital	Falko	-	Asset / Business Division Sale	Closed	-
19	11/4/2024	Air Transport Services	Stonepeak	\$3.1 billion	Full Acquisition	Pending	Not stated
20	11/3/2024	Pakistan International Airlines (PIA)	Punjab government	-	Full Acquisition	Proposed	-
21	10/31/2024	<u>JetBlue</u>	<u>Delta</u>	-	Merger	Unrealistic Acquisition	-
22	10/31/2024	<u>JetBlue</u>	United	-	Merger	Potential Acquisition Target	-
23	10/30/2024	1Aviation Groundhandling Services Corporation	Cebu Air Inc.	\$113 million	Financial Stake	Completed	-
24	10/28/2024	Pel-Air	Toll Group	-	Full Acquisition	Pending	-
25	10/28/2024	Ala	Hawaiian Airlines	\$1.9 billion	Merger	Completed	-
26	10/26/2024	Flybondi Limited	Integral Acquisition Corporation 1	-	Full Acquisition	Proposed	-
27	10/24/2024	Pelican Air Services	Dorsey, Wright & Associates	-	Financial Stake	Pending	-
28	10/24/2024	Pelican Air Services	Thomas Dorsey	-	Financial Stake	Completed	-
29	10/24/2024	SmartSky Networks	<u>Apcela</u>	-	Full Acquisition	Pending	-
30	10/23/2024	Iceland Express	WOW Air	-	Full Acquisition	Completed	-
31	10/23/2024	Airlec Air Espace	VallJet	-	Merger	Announced	-
32	10/23/2024	GrandView Aviation	Wheels Up	\$105 million	Full Acquisition	Completed	-
33	10/22/2024	Thomas Cook	eSky Group	-	Full Acquisition	Completed	-
34	10/22/2024	Chairman Aviation	Leviate Air Group	-	Financial Stake	Completed	-
35	10/22/2024	Aquila Air Capital	Wafra Inc.	-	Full Acquisition	Pending	-
36	10/21/2024	Global Crossing Airlines	Red Oak Partners	\$2 million	Financial Stake	Complete	-
37	10/19/2024	Dominion Aviation	Vantage Aviation	-	Full Acquisition	Completed	-
38	10/19/2024	Frontier Airlines (F9)	Spirit Airlines (NK)	-	Merger	Terminated	-

Airlines Financing M&A Deal for Airlines from 01 Jan to 13 Nov 2024



No.	Published Date	Acquired Company	Acquiring Company	Deal Value	M&A Type	M&A Status	Valuation
39	11/11/2024	<u>Vistara</u>	Air India (Tata Group)	-	Merger	In progress	-
40	10/17/2024	Capital A Bhd's low-cost aviation business and AirAsia X Bhd	<u>AirAsia</u>	RM6.8 billion	Full Acquisition	Completed	RM6.8 billion
41	10/16/2024	Capital A	AirAsia X	RM6.8 billion	Full Acquisition	Pending completion	-
42	10/16/2024	APOC Aviation	Deutsche Bank	Multi-million	Financial Stake	Secured	-
43	10/15/2024	Semolina Kitchens Pvt.	Adani Airport Holdings Ltd.	Rs 0.05 crore	Financial Stake	Completed	-
44	10/15/2024	Malaysia AirAsia	AirAsia X	RM6.8 billion	Full Acquisition	Pending Approval	-
45	10/14/2024	Tyrolean Jet Service	Gama Aviation	-	Full Acquisition	In Progress	-
46	10/12/2024	Qantas Airways	Nora Scheinkestel	A\$14,820.63	Financial Stake	Completed	-
47	10/11/2024	Fraport TAV Antalya Terminal	TAV Airports, Fraport AG	-	Full Acquisition	Approved	-
48	10/11/2024	Fraport TAV Antalya Terminal	TAV Airports and Fraport AG	_	Full Acquisition	Approved by EU Commission	-
49	10/3/2024	AIX Connect	Air India Express	-	Merger	Completed	-
50	10/3/2024	Skyroads Aviation	Manifest	-	Full Acquisition	Pending	-
51	10/2/2024	ACT Global	Kales Group	-	Full Acquisition	Completed	-
52	10/2/2024	Prima Air Sdn Bhd	Sin-Kung Logistics Bhd	RM20.7 million	Full Acquisition	Pending	RM20.7 million
53	10/1/2024	Ryanair Holdings PLC	SG Americas Securities, LLC	-	Financial Stake	Completed	\$24.39 billion
54	10/1/2024	Air India Express	AIX Connect	-	Merger	Completed	-
55	10/1/2024	Air India Express	Air India Group	-	Merger	Finalized	-
56	10/1/2024	AIX Connect	Air India Group	-	Merger	Completed	-
57	09/30/2024	Jet IN's FBO and ground handling operations at Milwaukee Mitchell International Airport (MKE)	Jet Aviation	_	Full Acquisition	Completed	-
58	09/27/2024	America West Airlines	US Airways	-	Merger	Completed	-
59	09/27/2024	Two local carriers based in Guernsey	Guernsey Chamber of Commerce (GCoC)	-	Merger	Proposed	-
60	09/26/2024	AirAsia Aviation Group Limited	AirAsia X	RM6.8 billion	Full Acquisition	Pending	-
61	09/25/2024	AirAsia Aviation Group Ltd (AAAGL) and AirAsia Bhd (AAB)	AirAsia X Bhd	RM6.8 billion	Full Acquisition	Proposed	_
62	09/25/2024	Frontier Group Holdings, Inc.	AlTi Global Inc.	\$21,222,000	Financial Stake	Completed	\$1.02 billion
63	09/25/2024	AirAsia Aviation Group Ltd (AAAGL) and AirAsia Bhd (AAB)	Capital A Bhd	RM6.8 billion	Full Acquisition	Proposed	-
64	09/24/2024	Southwest Airlines Co	Elliott Investment Management	-	Full Acquisition	Completed	-
65	09/23/2024	CUR8	British Airways	\$11 million	Full Acquisition	Completed	-
66	09/19/2024	Alaska Air Group Inc.	Hawaiian Holdings Inc.	\$1.9 billion	Full Acquisition	Closed deal	-
67	09/19/2024	Hawaiian Holdings	Alaska Air Group Inc.	\$1.9 billion	Full Acquisition	Closed	-
68	09/18/2024	<u>AirAsia X</u>	Capital A	-	Merger	Pending	-
69	09/18/2024	AirAsia Aviation Group Ltd and AirAsia Bhd	AirAsia X Bhd	RM6.8 billion	Full Acquisition	Pending	RM3 billion
70	09/17/2024	Hawaii Airlines	Alaska Airlines	_	Merger	Pending	-
71	09/16/2024	Castlelake Aviation	Avolon	\$5 billion	Full Acquisition	Pending	\$38.2 million

Airlines Financing M&A Deal for Airlines from 01 Jan to 13 Nov 2024



No.	Published Date	Acquired Company	Acquiring Company	Deal Value	M&A Type	M&A Status	Valuation
388	11/5/2024	MASwings Sdn Bhd	Sarawak government	-	Full Acquisition	Expected to be finalised by year-end	-
389	10/29/2024	Hawaiian Holdings	Alaska Air Group	\$1.9 billion	Full Acquisition	Completed	\$1.9 billion
390	10/21/2024	Hawaiian Airlines	Alaska Air	\$1.25 billion	Full Acquisition	Completed	-
391	09/18/2024	<u>AirAsia</u>	AirAsia X	-	Merger	Likely to start in 2025	-
392	3/12/2024	XCF Global Capital	Focus Impact BH3 Acquisition	\$1.84 billion	Merger	Pending	\$1.84 billion
393	02/26/2024	Capital A Berhad	AirAsia X Bhd	\$400 million	Merger	Pending	-
394	1/8/2024	AAGL	AirAsia X	-	Strategic Acquisition	-	-
395	1/8/2024	AirAsia Berhad	AirAsia Aviation Group	-	Asset/Business Division Sale	Proposed	-
396	1/8/2024	AirAsia, AirAsia X	AirAsia Aviation Group	-	Merger	In Progress	-
397	1/8/2024	USD Clean Fuels LLC	Ara Partners	-	Financial Stake	Completed	-
398	1/3/2024	Western Airlines	Delta Air Lines	\$860 million	Merger	-	-
399	1/2/2024	Chillaire Solutions	Beijer Ref	-	Financial Stake	Pending	-

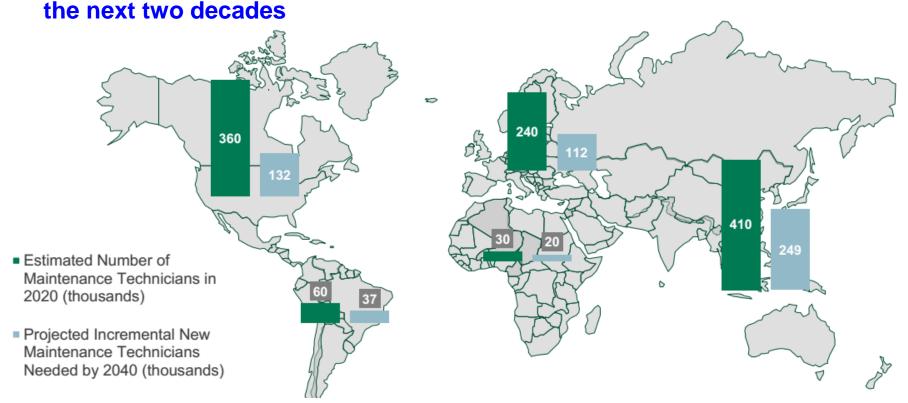
Source: usearch.com

[☐] There are 399 deals M&A in airlines industry from 01 Jan to 13 Nov 2024.

How to grow MRO business in the post covid era Viets



Global demand for new technicians will go up by approx. 50% over







- Recovery of airlines in 2024 is a momentum for growth of MRO business
- In the next 10 years, MRO industry in the world achieves the average growth of 2.9% per year.
- Applying latest technologies such as maintenance software, 3D printing, Al, big data, IOT, robot, blockchain, cloud computing ... into MRO will help enhance the productivity of MRO.
- Launching more MRO hub in the future helps answering the growth demand of MRO.
- Setting more training centers meets the increasing demand of the labor force for MRO in the future.
- Investment more on engine repair shop is the growth trend of MRO in the future since engine maintenance cost will occupy 50.6% of total maintenance costs for aircraft in 2033.
- The increasing of manufacturing companies in China and India will enhance the quantity of PMA, EPA parts for MRO industry which help reducing the costs of materials used in maintenance activities.



THANK YOU!