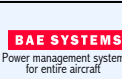
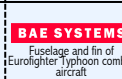
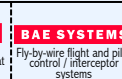
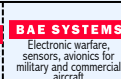
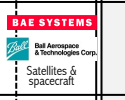
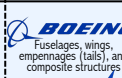
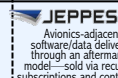
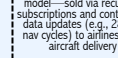


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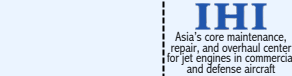
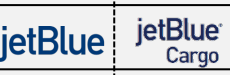
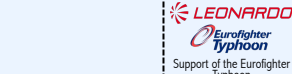
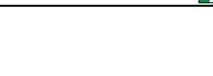
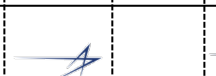
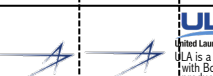
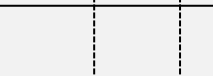
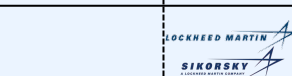
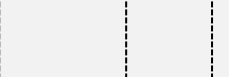
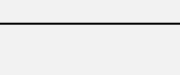
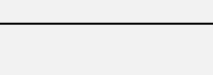
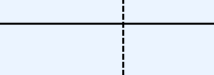
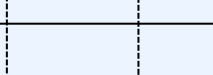
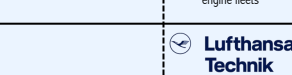
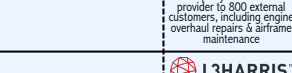
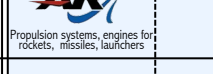
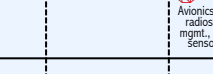
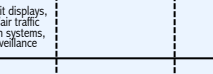
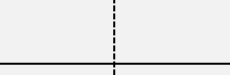
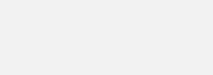
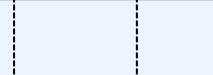
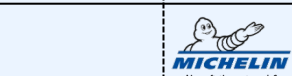
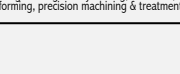
A KEY PLAYERS		B METAL, ALLOYS & MATERIALS		C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION				F FUELING/AFTER-MARKET					
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers Aircraft Operators Aviation Fuel and After-Market Service Providers		With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems.		Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. On major military projects, defense contractors may act as subcontractors for the lead defense contractor—for example, RTX (via its Pratt & Whitney unit) produces engines for military aircraft. Powertrain and Propulsion Systems Engines (turboprop, turbofan, turbojet, turbofan), gearboxes, propellers, rotors, shafts, fuel pumps, ignition systems, inverters, electric motors (for hybrid/electric aircraft), core, utility system management. Airframe and Structural Systems Fuselage, empennage (tail assembly), landing gear, control surfaces (ailerons, rudder, elevators), doors, hatches, cargo bays, fairings, canopies. Flight Control Systems Control sticks/yokes, pedals, cables, rods, hydraulic actuators, fly-by-wire systems, trim tabs, spoilers, flaps, slats. Avionics, Electrical Systems and Software Navigation systems, communication radios, wiring harnesses, sensors, batteries, circuit breakers, displays, autopilot systems. Environmental and Cabin Systems Pressurization, air conditioning, heating, oxygen systems, cabin lighting, seating, galley equipment, lavatories, insulation. Fuel and Thermal Management Systems Fuel tanks, fuel lines, pumps, valves, heat exchangers, oil coolers, engine radiators, thermal insulation, and detection. Safety and Emergency Systems Emergency oxygen, life rafts, evacuation slides, crashbelts, airbags, crash structures, fire suppression, lighting, emergency locator transmitters (ELTs).						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. Developing a new aircraft typically takes 6–8 years and includes the following six phases: (1) invention – defining customer requirements, performance, range, features, and propulsion; (2) design – creating interiors/exterior, aerodynamics, and wind-tunnel testing; (3) engineering – selecting components, validating performance, designing assembly processes, and obtaining certifications; (4) production – building or upgrading plants, tooling, pilot builds, sourcing materials, and training; (5) launch – certification and market promotion, and (6) after-sales support. Commercial OEMs (e.g., Boeing, Airbus) focus on passenger and cargo aircraft, while military OEMs (e.g., Lockheed Martin, Boeing, and Northrop Grumman) produce combat, transport, and specialized systems for national defense. Civilian Aviation Commercial Aircraft Refers to long-, medium- and short-haul aircraft in which commercial airlines transport passengers between destinations. Cargo Aircraft Refers to aircraft in which freight carriers transport packages, bulky items, general merchandise, and other goods. Business Jets, General and Work Aviation Refers to private jets and other aircraft used for corporate travel, recreational purposes or light training, and aerial work tasks such as firefighting, crop dusting, and construction. Military Aircraft, Satellites and Space Systems Fighter Aircraft Fast, maneuverable aircraft used for air combat, reconnaissance, and multirole missions, equipped with weapons, advanced avionics, and stealth features. Bombers Planes that deliver large payloads of bombs over long distances to support offensive missions. Transport Aircraft Aircraft in which U.S. Armed Forces transport troops to other military locations, extending their range and mission capability. Refueling Tankers Aircraft that transfer fuel in flight to other military aircraft, extending their range and mission capability. Space & Launch Systems Space vehicle missions, science, Earth observation, satellite tasks, and missiles.						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service; (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains; (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense; and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge.				To support both commercial and military operations, aviation gas and jet fuel are supplied by major providers such as ExxonMobil, Chevron, Shell, bp, and Phillips 66, delivering jet fuel (for jet engines) and aviation gasoline (for small plane engines) to airports, airlines, and military bases. Beyond fuel, the aerospace industry relies on a robust after-market services sector, including companies like Boeing Global Services, AAR Corp, and Lufthansa Technik, which provide maintenance, repair and overhaul (MRO), upgrade, spare parts distribution, sustainment, and technical support to keep aircraft operational and compliant with safety regulations.					
 ADITYA BIRLA GROUP		 HINDALCO HAAL IV makes aluminum billet, slab & extrusions  Novelis Rolled aluminum plate and sheet and pre-cut shapes		 arianespaceGROUP 50/50 JV with Safran that makes liquid and cryogenic engines		 AIRBUS Commercial airframes, wing assemblies, and fuselage sections				 AIRBUS		 AIRBUS		 ACJ		 AIRBUS Combat aircraft and drones Eurofighter Typhoon JV with BAE 33% & Leonardo 21%		 AIRBUS		 AIRBUS		 arianespaceGROUP Space launchers, 50/50 JV with Safran  AIRBUS Satellites, spacecraft		 AIRBUS SATAIR Maintenance, repair, training, spare parts (via Satair), digital fleet support, and cabin or performance upgrades throughout an aircraft's lifecycle	
 Alaska AIRLINES																		 Alaska AIRLINES HORIZON AIR		 Alaska AIR CARGO		 Alaska AIRLINES Provides line and heavy maintenance but does not operate a large-scale third-party MRO business			
 allegiant																		 allegiant							
 ArcelorMittal		 ArcelorMittal Steel for landing gear, engine parts, and structural components																							
 ALCOA		 ALCOA Aluminum smelting, proprietary lithium alloy production, and titanium and specialty metals		 ALCOA Structural parts for jet engines, encasements for rotating parts		 ALCOA Fuselage seat track assemblies & large forgings, wing skins/ribs, & fastening systems – screws, bolts																			
 amazon																		 amazon Prime Air Amazon now offers air cargo services to third-parties							
 American																		 American Offers full maintenance, repair, and overhaul services for American's own fleet and 150+ global airline customers, including engine & airframe maintenance, avionics, hydraulics, and landing gear component overhaul		 American Airlines Cargo					
 APOLLO		 ARCONIC Rolled aluminum sheet, plate, and extrusions																							
 BAE SYSTEMS				 BAE SYSTEMS Power management system for entire aircraft		 BAE SYSTEMS Fuselage and fin of Eurofighter Typhoon combat aircraft		 BAE SYSTEMS Fly-by-wire flight and pilot control /interceptor systems		 BAE SYSTEMS Electronic warfare, sensors, avionics for military and commercial aircraft						 BAE SYSTEMS Hawk jet training aircraft Eurofighter Typhoon				 BAE SYSTEMS Ball Aerospace & Technologies Corp. Satellites & spacecraft				 BAE SYSTEMS Aircraft support services for its legacy commercial aircraft fleets	
 BAOWU		 BAOWU SPECIAL STEEL Steel for landing gear, engine parts, and structural components																							
 BASF		 BASF Specialized plastics, chemicals & composites for aircraft components OEMs & MRO operations																		 BASF Jet fuel additives & sustainable aviation fuel					
 BERKSHIRE HATHAWAY INC.				 PCC Precision Castparts Corp. Metal and titanium-based components for engines		 PCC Precision Castparts Corp. Metal & titanium airframe parts		 TTI Electronic components for military and commercial applications  HEICO Power converters, avionic control panels, radio frequency parts		 FlightSafety Aviation training services and flight simulators								 NETJETS Provider of fractional jet ownership and private jet rentals, but not a manufacturer				 HEICO Replacements parts, including airframe and jet engine components			
 BOEING				 BOEING Fuselage, wings, empennages (tails), and composite structures  SPIRIT AeroSystems Spirit AeroSystems was acquired by Boeing for \$4.7 billion in December 2025, with some parts business lines going to Airbus; it produces fuselage / wing assemblies and aero-structures		 JEPPESEN Flight navigation data, charts, and digital planning tools used by pilots, airlines, and air traffic operators worldwide; Jeppesen is the "information layer" of aviation—it supplies the maps, procedures, and software that help aircraft plan routes, navigate safely, and comply with regulations, both in the cockpit and on the ground.				 BOEING 737 767 777 787 747 767 787 9 737 MAX 8 737 MAX 9 737 MAX 10 737 MAX 11 737 MAX 12		 BOEING BJ		 BOEING F/A-18 Super Hornet Tactical Aircraft AH-64 Apache Attack Helicopter		 BOEING B-18 Lancer Supersonic and B-52 Conventional Bombers		 BOEING C-17 globemaster III, C-40A Air Force One, P-8 and E-7 ISR Aircraft		 BOEING KC-46A Pegasus Tanker		 BOEING Commercial & government satellites; missiles  ULA United Launch Alliance Launchers; a 50/50 JV with Lockheed Martin to produce space launch systems		 JEPPESEN Avionics-adjacent software/data delivered through an aftermarket model—sold via recurring subscriptions and continuous data updates (e.g., 28-day nav cycles) to airlines after aircraft delivery  SPIRIT AeroSystems Maintenance, repair and overhaul services on large structural components	

U.S Aerospace Industry: Landscape (2 of 7)

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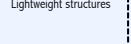
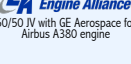
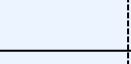
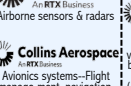
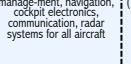
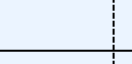
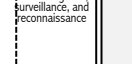
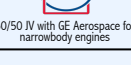
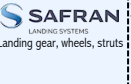
A KEY PLAYERS		B METAL, ALLOYS & MATERIALS		C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION				F FUELING/AFTER-MARKET	
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers AIRBUS Aircraft Operators UPS DELTA U.S. AIR FORCE Aviation Fuel and After-Market Service Providers		With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems.		Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. 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Avionics, Electrical Systems and Software Navigation systems, communication systems, radar, flight management systems, engine sensors, displays, autopilot systems. Environmental and Cabin Systems Pressurization, air conditioning, heating, oxygen systems, cabin lighting, seating, galley equipment, lavatories, insulation. Fuel and Thermal Management Systems Fuel tanks, fuel lines, pumps, valves, heat exchangers, oil coolers, engine radiators, thermal insulation, and detection. Safety and Emergency Systems Emergency oxygen, life rafts, evacuation slides, crash structures, fire suppression, lighting, emergency locator transmitters (ELTs).						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. 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Cargo Aircraft Refers to aircraft in which freight carriers transport packages, bulky items, general merchandise, and other goods. Business Jets, General and Work Aviation Refers to private jets and other aircraft used for corporate travel, recreational purposes or light training, and aerial work tasks such as firefighting, crop dusting, and construction. Military Aircraft, Satellites and Space Systems Fighter Aircraft Fast, maneuverable aircraft used for air combat, reconnaissance, and multirole missions, equipped with advanced weapons, avionics, and stealth features. Bombers Planes that deliver large payloads of bombs over long distances to support offensive missions. Transport Aircraft Aircraft in which U.S. Armed Forces transport troops to other military locations, extending their range and mission capability. Refueling Tankers Aircraft use to transfer fuel in flight to other military planes, extending their range and mission capability. Space & Launch Systems Space vehicle missions, science, Earth observation, satellite tasks, and missiles.						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service; (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains; (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense; and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge.				To support both commercial and military operations, aviation gas and jet fuel are supplied by major providers such as ExxonMobil, Chevron, Shell, bp, and Phillips 66, delivering jet fuel (for jet engines) and aviation gasoline (for small plane engines) to airports, airlines, and military bases. Beyond fuel, the aerospace industry relies on a robust after-market services sector, including companies like Boeing Global Services, AAR Corp, and Lufthansa Technik, which provide maintenance, repair and overhaul (MRO), upgrade, spare parts distribution, sustainment, and technical support to keep aircraft operational and compliant with safety regulations.	
																				 Castrol supplies aviation hydraulic fluids and specialty greases, with limited turbine/APU oil presence; primary jet engine oils are dominated by ExxonMobil and Shell.	
		 Natural and synthetic rubber		 Aircraft tires																 Retread and maintenance services for aircraft tires	
		 Specialty structural alloys for landing gear, engine mounts, gears, actuation systems, and soft magnetic alloys for avionics and motors																			
		 High performance engineering polymers and composites, a focusing on materials for lightweighting and durability																			
																 Asia Pacific markets Endura Fuels Sustainable aviation fuel					
				 Commercial and smaller regional jets																	
		 Aluminum plate and sheet for fuselage and wing structures, aluminum-lithium alloys for lightweighting, aluminum extrusions for stringers, floor structures and seat tracks, and round and square bars for engine components, general engineering applications and forgings																			
																 ENDEAVOR AIR Republic Airways				 DASH Small packages SKYTEAM CARGO JV with 10 airlines	
		 Various chemicals and plastics																			
		 High-performance plastics to withstand extreme temperatures and used in various aerospace applications, such as locking fasteners and seals																			
										 Regional jets Business jets											
																 Energy Transfer is Sunoco's general partner & owns a 34% stake					
		 Chemical														 Aviation ExxonMobil Aviation Lubricants					

A	B	C	D	E	F
KEY PLAYERS	METAL, ALLOYS & MATERIALS	AIRCRAFT COMPONENTS	AIRCRAFT ASSEMBLY & PRODUCTION	AIRCRAFT OPERATION	FUELING/AFTER-MARKET
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers AIRBUS Aircraft Operators UPS DELTA U.S. AIR FORCE Aviation Fuel and After-Market Service Providers	With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems. Aluminum, Steel & Copper Plastics, Polymers, Rubber, Composites & Carbon Fiber Reinforcements	Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. On major military projects, defense contractors may act as subcontractors for the lead defense contractor—for example, RTX (via its Pratt & Whitney unit) produces engines for military aircraft. Powertrain and Propulsion Systems Airframe and Structural Systems Flight Control Systems Avionics, Electrical Systems and Software Environmental and Cabin Systems Fuel and Thermal Management Systems Safety and Emergency Systems	Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. Developing a new aircraft typically takes 6–8 years and includes the following six phases: (1) invention – defining customer requirements, performance, range, features, and propulsion; (2) design – creating interiors/exterior, aerodynamics, and wind-tunnel testing; (3) engineering – selecting components, validating performance, designing assembly processes, and obtaining certifications; (4) production – building or upgrading plants, tooling, pilot builds, sourcing materials, and training; (5) launch – certification and market promotion, and (6) after-sales support. Commercial OEMs (e.g., Boeing, Airbus) focus on passenger and cargo aircraft, while military OEMs (e.g., Lockheed Martin, Boeing, and Northrop Grumman) produce combat, transport, and specialized systems for national defense. Civilian Aviation Commercial Aircraft Cargo Aircraft Business Jets, General and Work Aviation Fighter Aircraft Bombers Transport Aircraft Refueling Tankers Space & Launch Systems	Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service, (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains, (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense, and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge. Commercial Airlines Cargo Airlines U.S. Military and Homeland Security Spacecraft Operators	To support both commercial and military operations, aviation gas and jet fuel are supplied by major providers such as ExxonMobil, Chevron, Shell, bp, and Phillips 66, delivering jet fuel (for jet engines) and aviation gasoline (for small plane engines) to airports, airlines, and military bases. Beyond fuel, the aerospace industry relies on a robust after-market services sector including companies like Boeing Global Services, AAR Corp, and Lufthansa Technik, which provide maintenance, repair and overhaul (MRO) upgrade, spare parts distribution, sustainment and technical support to keep aircraft operational and compliant with safety regulations. Aviation Gas / Jet Fuel Replacement Parts & Support Service to Third Parties

A KEY PLAYERS		B METAL, ALLOYS & MATERIALS		C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION				F FUELING/AFTER-MARKET					
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers AIRBUS Aircraft Operators UPS DELTA U.S. AIR FORCE Aviation Fuel and After-Market Service Providers		With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems. Aluminum, Steel & Copper Plastics, Polymers, Rubber, Composites & Carbon Fiber Reinforcements		Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. On major military projects, defense contractors may act as subcontractors for the lead defense contractor—for example, RTX (via its Pratt & Whitney unit) produces engines for military aircraft. Powertrain and Propulsion Systems Airframe and Structural Systems Flight Control Systems Avionics, Electrical Systems and Software Environmental and Cabin Systems Fuel and Thermal Management Systems Safety and Emergency Systems						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. Developing a new aircraft typically takes 6–8 years and includes the following six phases: (1) invention – defining customer requirements, performance, range, features, and propulsion; (2) design – creating interiors/exterior, aerodynamics, and wind-tunnel testing; (3) engineering – selecting components, validating performance, designing assembly processes, and obtaining certifications; (4) production – building or upgrading plants, tooling, pilot builds, sourcing materials, and training; (5) launch – certification and market promotion, and (6) after-sales support. Commercial OEMs (e.g., Boeing, Airbus) focus on passenger and cargo aircraft, while military OEMs (e.g., Lockheed Martin, Boeing, and Northrop Grumman) produce combat, transport, and specialized systems for national defense. Civilian Aviation Commercial Aircraft Cargo Aircraft Business Jets, General and Work Aviation Fighter Aircraft Bombers Transport Aircraft Refueling Tankers Space & Launch Systems						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service, (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains, (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense, and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge. Commercial Airlines Cargo Airlines U.S. Military and Homeland Security Spacecraft Operators				To support both commercial and military operations, aviation gas and jet fuel are supplied by major providers such as ExxonMobil, Chevron, Shell, bp, and Phillips 66, delivering jet fuel (for jet engines) and aviation gasoline (for small plane engines) to airports, airlines, and military bases. Beyond fuel, the aerospace industry relies on a robust after-market services sector, including companies like Boeing Global Services, AAR Corp, and Lufthansa Technik, which provide maintenance, repair and overhaul (MRO), upgrade, spare parts distribution, sustainment, and technical support to keep aircraft operational and compliant with safety regulations. Aviation Gas / Jet Fuel Replacement Parts & Support Services to Third Parties					
 Ishikawajima-Harima Heavy Industries		 Metal alloys for disks, blisks, and gears		 Composite materials, surface treatments/coatings to protect against wear on engines and fasteners and against high temperatures, corrosion, and erosion on jet engines		 Engines and engine components for Japanese military and civilian aircraft, and rocket engines, liquid propellant, and satellite launch vehicles systems																		 Asia's core maintenance, repair, and overhaul center for jet engines in commercial and defense aircraft	
																									
		 High-strength aluminum plate, sheet, and extrusions used in every major aircraft/spacecraft platform for fuselages, wing structures, landing gear, launchers																							
				 Fuselages, wing components for civil and military aircraft		 Defense avionics, radar systems, sensors, electronic components																		 Support of the Eurofighter Typhoon	
				 Military airframes and stealth aircraft structures				 Prime contractor for F-35 Lightning, F-16 Falcon, and F-22 Raptor stealth fighters  Makes C-130 Hercules & C-5 Galaxy & Marine One transport aircraft  Produces KC-130J super Hercules refueling tanker/transport aircraft  United Launch Alliance (ULA) is a 50/50 JV with Boeing to produce space launch systems  GPS satellites & spacecrafts										 After-market "sustainment" services for military jets & helicopters (Sikorsky)  MRO services for commercial engine fleets							
																									
		 Sheet metal fabrication and machining		 Composite fabrication (fiber glass, graphite, & Kevlar), conversion coating, and paint		 Propulsion systems, engines for rockets, missiles, launchers		 Avionics/cockpit displays, radios, flight/air traffic mgmt., mission systems, sensors, surveillance														 Military aircraft "missionizations" and modifications & upgrades of avionics systems and cockpit displays			
																								 Conventional & sustainable aviation fuel	
				 Structural engineered engine components		 Fuselages, wing structures, empennages (tails), metallic / composite aerostructures		 Electrical wiring systems																	
																				 Operates regional flights for United					
		 Natural and synthetic rubber		 Aircraft tires																				 Aircraft tire retread & maintenance services	
		 A COMPANY OF MONTANA TECH COMPONENTS AG High strength alloy casting, extrusion, forming, precision machining & treatment		 A COMPANY OF MONTANA TECH COMPONENTS AG Composite materials for aerostructure parts & components		 Engine components for high thermal and mechanical loads		 Lightweight components & structures for airframes																	
				 Military & commercial propulsion systems, engine parts, turbines, compressors																				 A top 3 MRO provider, servicing 30+ engine types from simple repairs to full engine overhauls	
																								 Sustainable aviation fuel	
		 Steel for landing gear, engine parts, and structural components																							

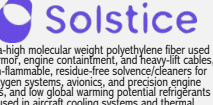
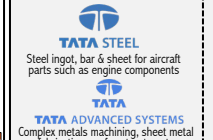
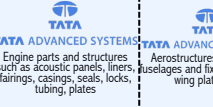
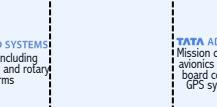
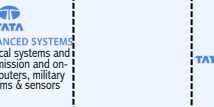
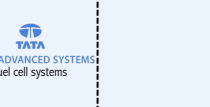
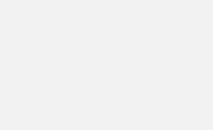
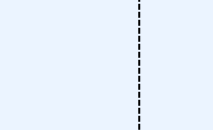
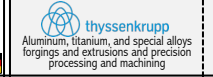
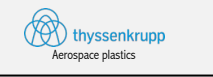
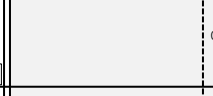
U.S Aerospace Industry: Landscape (5 of 7)

March 2026

A KEY PLAYERS		B METAL, ALLOYS & MATERIALS		C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION				F FUELING/AFTER-MARKET	
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers AIRBUS Aircraft Operators UPS DELTA U.S. AIR FORCE Aviation Fuel and After-Market Service Providers		With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems.		Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. On major military projects, defense contractors may act as subcontractors for the lead defense contractor—for example, RTX (via its Pratt & Whitney unit) produces engines for military aircraft. Powertrain and Propulsion Systems Engines (turboprop, turbofan, turbojet, turbofan), propellers, rotors, shafts, fuel pumps, ignition systems, inverters, electric motors (for hybrid/electric aircraft), core, utility system (power management). Airframe and Structural Systems Fuselage, empennage (tail assembly), landing gear, control surfaces (ailerons, rudder, elevators), doors, hatches, tabs, spoilers, flaps, slats, cargo bays, fairings. Flight Control Systems Control sticks/yokes, pedals, cables, rods, hydraulic actuators, fly-by-wire systems, trim tabs, spoilers, flaps, slats. Avionics, Electrical Systems and Software Navigation systems, communication radios, wiring harnesses, sensors, batteries, circuit breakers, displays, autopilot systems. Environmental and Cabin Systems Pressurization, air conditioning, heating, cooling systems, cabin lighting, seating, galley equipment, lavatories, insulation. Fuel and Thermal Management Systems Fuel tanks, fuel lines, pumps, valves, heat exchangers, oil coolers, engine radiators, thermal insulation, and detection. Safety and Emergency Systems Emergency oxygen, life rafts, evacuation slides, seatbelts, airbags, crash structures, fire suppression, lighting, emergency locator transmitters (ELTs).						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. 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Cargo Aircraft Refers to aircraft in which freight carriers transport packages, bulky items, general merchandise, and other goods. Business Jets, General and Work Aviation Refers to private jets and other aircraft used for corporate travel, recreational purposes or light training, and aerial work tasks such as firefighting, crop dusting, and construction. Military Aircraft, Satellites and Space Systems Fighter Aircraft Fast, maneuverable aircraft used for air combat, reconnaissance, and multirole missions, equipped with weapons, avionics, and stealth features. Bombers Planes that deliver large payloads of bombs over long distances to support offensive missions. Transport Aircraft Aircraft in which U.S. Armed Forces transport troops to other military bases, extending their range and mission capability. Refueling Tankers Aircraft used to transfer fuel in flight to other military aircraft, extending their range and mission capability. Space & Launch Systems Space vehicle missions, science, Earth observation, satellite tasks, and missiles.						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service; (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains; (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense; and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge.				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		 Specialty composites for aero-structures and engine components		 Propulsion systems/components, such as liquid propulsion/rocket motors, bio-propellant engines, thrusters for military/commercial aircraft, missiles, commercial satellites, and spacecraft		 Wing skins, fuselage parts, nacelles, for military aircraft		 Avionics, radars for fighter jets, sensors, electronic warfare systems, inertial navigation systems		 NORTHROP GRUMMAN vehicles / drones		 NORTHROP GRUMMAN B-2 Spirit stealth bomber (in service) and B-21 Raider stealth bomber (in development and production)		 NORTHROP GRUMMAN spacecraft such as lunar modules and satellites for national security, science and commercial purposes		 Full life-cycle support—engine maintenance, spare parts, and repair services.					
				 Landing gear components		 Hydraulic systems—e.g. landing gear, flight controls, fuel systems		 Fuel management systems													
 ONEAL INDUSTRIES		 TW METALS G&L TUBE AN ONEAL COMPANY  SLICE OF A TUBE  UNITED OF TUBES Specialty metals distributor of tube, pipe, bar, sheet, & plate		 O'NEAL MANUFACTURING SERVICES Fastening components  FABRISONIC Lightweight structures		 FABRISONIC Embedded sensors & electronics in metal structures, for strain data		 FABRISONIC Aluminum and copper heat exchangers and satellite radiators													
																 Aviation fuels, engine oils, hydraulic fluids, and smoke oils					
		 Steel for landing gear, engine parts, and structural components																			
 American owns a 25% stake														 Operates regional flights for American, Delta, and United							
				 Commercial and military jet engines, auxiliary power systems																	
				 Turboprop engines, geared turbofans, auxiliary power, military propulsion  50/50 JV with GE Aerospace for Airbus A380 engine		 Nacelles, pylons, flight control surfaces, and landing systems (landing gear, wheels & brakes)  Flight control actuation and hydraulics		 Airborne sensors & radars  Environmental control (A/C, pressurization, ventilation), seats (first, business, main cabins), passenger experience (lighting, entertainment, connectivity)  Avionics systems—Flight management, navigation, cockpit electronics, communication, radar systems for all aircraft		 Fuel control and distribution systems  Fire protection systems (detection & suppression for engines, cargo & cabin), evacuation systems (inflatable slides, slide/rafts, life rafts), ice detection and protection systems		 Missile systems and space-based payloads for missile defense, missile warning, and intelligence surveillance, and reconnaissance		 Missile systems and space-based payloads for missile defense, missile warning, and intelligence surveillance, and reconnaissance		 Pratt & Whitney: fleet management & engine MRO, (2) Collins Aerospace: spares, repairs and engineering for avionics, environmental & flight controls electric power, lighting and interior systems, and (3) Raytheon: defense sustainment					
 AEROSPACE-DEFENCE-SECURITY		 Commercial / military engines, auxiliary power units  50/50 JV with GE Aerospace for narrowbody engines		 Landing gear, wheels, struts  Brake pedals, hydraulic equipment		 Avionics such as cockpit equipment, flight control systems and navigation, braking systems, wiring		 Fuel management systems, refueling valves		 Safety systems such as emergency evacuation slides, oxygen masks and life vests		 Space launchers, 50/50 JV with Airbus									
																 Jet fuel, avgas, sustainable aviation fuel, lubes (engine oils, greases, hydraulic fluids)  Refueling networks & technical services for fuel handling and quality assurance					
														 Operates regional flights for American, Delta, and United							
		 Adhesives, surfacing films, primers, polymers																			

U.S Aerospace Industry: Landscape (6 of 7)

March 2026

A KEY PLAYERS			B METAL, ALLOYS & MATERIALS			C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION				F FUELING/AFTER-MARKET									
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Environmental and Cabin Systems Pressurization, air conditioning, heating, oxygen systems, cabin lighting, seating, galley equipment, lavatories, insulation. Fuel and Thermal Management Systems Fuel tanks, fuel lines, pumps, valves, heat exchangers, oil coolers, engine radiators, thermal insulation, and fire detection. Safety and Emergency Systems Emergency oxygen, life rafts, evacuation slides, crash structures, fire suppression, lighting, emergency locator transmitters (ELTs).						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. 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Cargo Aircraft Refers to aircraft in which freight carriers transport packages, bulky items, general merchandise, and other goods. Business Jets, General and Work Aviation Refers to private jets and other aircraft used for corporate travel, recreational purposes or light training, and aerial work tasks such as firefighting, crop dusting, and construction. Military Aircraft, Satellites and Space Systems Fighter Aircraft Fast, maneuverable aircraft used for air combat, reconnaissance, and multirole missions, equipped with weapons, avionics, and stealth features. Bombers Planes that deliver large payloads of bombs over long distances to support offensive missions. Transport Aircraft Aircraft in which U.S. Armed Forces transport troops to other military locations, extending their range and mission capability. Refueling Tankers Aircraft that use to transfer fuel in flight to other military aircraft, extending their range and mission capability. Space & Launch Systems Space vehicle missions, science, Earth observation, satellite tasks, and missiles.						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service; (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains; (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense; and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge.				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 Solstice Solstice Advanced Metals was spun off from Honeywell in 2025.			 Solstice Brazing materials to ensure durable, heat-resistant seals in engine and cooling components.			 Solstice Ultra-high molecular weight polyethylene fiber used for armor, engine containment, and heavy-lift cables (non-flammable, residue-free solvents/cleaners for oxygen systems, avionics, and precision engine parts; and low global warming potential refrigerants used in aircraft cooling systems and thermal installations).																									
 Southwest																		 Southwest						 Southwest Maintains all-Boeing 737 fleet, uses outside MRO providers for heavy work, but does not offer third party service							
 SPACEX												 SPACEX Launch service, reusable vehicle																			
 spirit																		 spirit													
 TATA			 TATA STEEL Steel ingot, bar & sheet for aircraft parts such as engine components TATA TATA ADVANCED SYSTEMS Complex metals machining, sheet metal fabrication, surface treatments			 TATA TATA ADVANCED SYSTEMS Composites						 TATA TATA ADVANCED SYSTEMS Engine parts and structures such as acoustic panels, liner fairings, casings, seals, locks, tubing, plates		 TATA TATA ADVANCED SYSTEMS Aerostructures, including fuselages and fixed and rotary wing platforms		 TATA TATA ADVANCED SYSTEMS Mission critical systems and avionics – mission and on-board computers, military GPS systems & sensors		 TATA TATA ADVANCED SYSTEMS Fuel cell systems								 TATA TATA ADVANCED SYSTEMS Assembly, integration, testing of satellites					
 THALES						 THALES Flight control & mission systems						 THALES Navigation, cockpit displays, in-flight entertainment		 THALES Air traffic management systems								 THALES Satellites				 THALES MRO, aircraft-on-ground, and digital services					
 TEXTRON						 TEXTRON Electronic systems						 TEXTRON Electronic systems		 TEXTRON Electronic systems		 Business aircraft TEXTRON AVIATION Beechcraft Hawker Cessna TEXTRON Systems Drones for combat, intelligence, surveillance, and reconnaissance purposes Attack helicopters and tiltrotor aircraft						 BELL Transport and utility helicopters for military and commercial markets; tiltrotor aircraft for military transport				 TEXTRON AVIATION MRO, parts support, aircraft-on-ground support, and flight training programs TEXTRON Systems Electronic and drone systems support Helicopter spare parts					
 thyssenkrupp			 thyssenkrupp Aluminum, titanium, and special alloys forgings and extrusions and precision processing and machining			 thyssenkrupp Aerospace plastics						 thyssenkrupp Seamless rolled rings and custom slewing bearings for engine structures																			
 'TORAY' Innovation by Chemistry			 'TORAY' Carbon fiber, thermoset and thermos plastic resins (composite prepreps), and other composite materials for aero structures																												
 UNITED												 UNITED UNITED EXPRESS MESA AIRLINES Republic Airways GoJet AIRLINES SkyWest COMMUTEAIR						 UNITED CARGO				 Technical Operations Global MRO services provider to third parties and its own aircraft fleet, focusing on engine overhauls, component repairs and maintenances, line maintenance, and aircraft on ground services									
 ups												 ups Production support in the form of (1) inbound-to-manufacturing quality inspection and shipment management of raw materials, components, and sub-assemblies arriving at aircraft factories; (2) creating customized kits of parts to simplify assembly line processing (i.e. kitting); (3) managing vendor managed inventory (VMI) to ensure just-in-time delivery; and (4) quality control						 ups				 ups (1) MRO support for UPS's 300-aircraft fleet; (2) third party aircraft-on-ground services such as 24/7/365 critical spares fulfillment; & (3) customs brokerage and defense-related regulatory compliance support									

U.S Aerospace Industry: Landscape (7 of 7)

March 2026

A KEY PLAYERS		B METAL, ALLOYS & MATERIALS		C AIRCRAFT COMPONENTS						D AIRCRAFT ASSEMBLY & PRODUCTION						E AIRCRAFT OPERATION		F FUELING/AFTER-MARKET	
Metals and Materials Metal, Materials & Component Suppliers Aircraft Original Equipment Manufacturers AIRBUS Aircraft Operators UPS DELTA U.S. AIR FORCE Aviation Fuel and After-Market Service Providers		With a typical commercial jet weighing hundreds of thousands of pounds, the aircraft industry is one of the world's largest consumers of aluminum, titanium, steel, composites, plastics, and specialty alloys, all selected to balance strength, weight, and durability. Aluminum forms the primary structure of fuselage, wings, and control surfaces due to its high strength-to-weight ratio, while titanium and high-strength steel reinforce landing gear, engine components, and critical load-bearing structures. Composites such as carbon fiber and fiberglass reduce weight in wings, fuselage panels, and tail sections, improving fuel efficiency. Plastics and polymers shape interiors, insulation, and cabin fixtures; rubber is used in tires, seals, and vibration dampers; and copper and wiring harnesses conduct electricity for avionics, lighting, and flight control systems.		Original equipment manufacturers of commercial and military aircraft depend on extensive supply chains for components—such as steel, aluminum, and composite parts, jet engines, avionics, power and control systems, semiconductors, and electronics—plus sub-assemblies and engineering services. Key components include propulsion and powertrain components, airframe structures and structural elements, flight controls, avionics/electrical systems, and cabin/interior systems. OEMs integrate thousands of parts from global suppliers into finished aircraft that meet strict performance, safety, and regulatory standards. On major military projects, defense contractors may act as subcontractors for the lead defense contractor—for example, RTX (via its Pratt & Whitney unit) produces engines for military aircraft. Powertrain and Propulsion Systems Engines (turboprop, turbofan, turbojet, piston), gearboxes, propellers, rotors, shafts, fuel pumps, ignition systems, inverters, electric motors (for hybrid/electric aircraft), core, utility system management. Airframe and Structural Systems Fuselage, empennage (tail assembly), landing gear, control surfaces (ailerons, rudder, elevators), doors, hatches, bays, fairings, canopies. Flight Control Systems Control sticks/yokes, pedals, cables, rods, hydraulic actuators, fly-by-wire systems, trim tabs, spoilers, flaps, slats. Avionics, Electrical Systems and Software Flight navigation systems, communication radios, wiring harnesses, sensors, batteries, circuit breakers, displays, autopilot systems. Environmental and Cabin Systems Pressurization, air conditioning, heating, oxygen systems, cabin lighting, seating, galley equipment, lavatories, insulation. Fuel and Thermal Management Systems Fuel tanks, fuel lines, pumps, valves, heat exchangers, oil coolers, engine radiators, thermal insulation, and detection. Safety and Emergency Systems Emergency oxygen, life rafts, evacuation slides, seatbelts, airbags, crash structures, fire suppression, lighting, emergency locator transmitters (ELTs).						Commercial and military aircraft original equipment manufacturers (OEMs) produce aircraft using components they design or source from suppliers. Developing a new aircraft typically takes 6–8 years and includes the following six phases: (1) invention – defining customer requirements, performance, range, features, and propulsion; (2) design – creating interiors/exterior, aerodynamics, and wind-tunnel testing; (3) engineering – selecting components, validating performance, designing assembly processes, and obtaining certifications; (4) production – building or upgrading plants, tooling, pilot builds, sourcing materials, and training; (5) launch – certification and market promotion, and (6) after-sales support. Commercial OEMs (e.g., Boeing, Airbus) focus on passenger and cargo aircraft, while military OEMs (e.g., Lockheed Martin, Boeing, and Northrop Grumman) produce combat, transport, and specialized systems for national defense. Civilian Aviation Commercial Aircraft Refers to long-, medium- and short-haul aircraft in which commercial airlines transport public passengers between destinations. Cargo Aircraft Refers to aircraft in which freight carriers transport packages, bulky items, general merchandise, and other goods. Business Jets, General and Work Aviation Refers to private jets and other aircraft used for corporate travel, recreational purposes or light training, and aerial work tasks such as firefighting, crop dusting, and construction. Military Aircraft, Satellites and Space Systems Fighter Aircraft Fast, maneuverable aircraft used for air combat, reconnaissance, and multirole missions, equipped with weapons, advanced avionics, and stealth features. Bombers Planes that deliver large payloads of bombs over long distances to support offensive missions. Transport Aircraft Aircraft in which U.S. Armed Forces transport troops to other military bases, extending their range and mission capability. Refueling Tankers Aircraft use to transfer fuel in flight to other military planes, extending their range and mission capability. Space & Launch Systems Space vehicle missions, science, Earth observation, satellite tasks, and missiles.						Key aircraft operators encompass (1) commercial airlines, such as Delta, United, American, and Southwest, which provide passenger transportation on domestic and international routes, focusing on efficiency, safety, and customer service; (2) dedicated cargo fleet operators, including FedEx, UPS, and DHL, which transport freight in support of global logistics and supply chains; (3) the U.S. military, which operates a diverse fleet of aircraft—including fighters, bombers, transport, and reconnaissance planes—to maintain national defense, and (4) NASA, the U.S. space agency, which manages specialized aircraft for research, aeronautics testing, and spaceflight operations—e.g., space shuttles, research planes, and experimental vehicles to advance scientific knowledge.		To support both commercial and military operations, aviation gas and jet fuel are supplied by major providers such as ExxonMobil, Chevron, Shell, bp, and Phillips 66, delivering jet fuel (for jet engines) and aviation gasoline (for small plane engines) to airports, airlines, and military bases. Beyond fuel, the aerospace industry relies on a robust after-market services sector, including companies like Boeing Global Services, AAR Corp, and Lufthansa Technik, which provide maintenance, repair and overhaul (MRO), upgrade, spare parts distribution, sustainment, and technical support to keep aircraft operational and compliant with safety regulations.	
																 Air and Marine Operations Division runs largest civilian law enforcement air force for surveillance & interdictions			
 The Federal Government of the United States of America																 Operates 200+ aircraft / helicopters for search-and-rescue missions and coastal law enforcement			
																 Operates national intelligence satellites			
																 Space-based GPS, satellite communications & missile warning systems			
																 DoD maintains a fleet of 10,000+ military aircraft			
																			
		Core research into ultra-lightweight materials, high-temperature composite structures, and materials that can withstand extreme space and flight environments		Advanced additive manufacturing / 3D printing of rocket engine nozzles from specialized aluminum alloys, core propulsion system research						Air traffic management systems & software development; autonomous flight tools to accommodate drone traffic						Core research, concept development and engineering validation for electric air taxi design			
																 Operates the Air Force One transport aircraft for the U.S. President			
																 Operates the Marine One transport helicopter for the U.S. President			
																 DIAMOND GREEN DIESEL 50/50 JV with Darling Ingredients, makes sustainable aviation fuel			
																			
																 Supply and distribution of aviation fuel (including sustainable aviation fuel), but no production		 Fixed base operations & aviation support services (e.g., trip planning, permits, fuel order cards, ground products, logistics, & flight scheduling)	

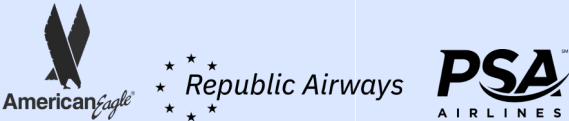
DOMESTIC

2025 Revenue: \$35.2B

In the Domestic segment, American Airlines and its regional carriers transport people throughout North America through hubs in Philadelphia (PHI), Dallas-Fort Worth (DFW), Charlotte (CLT), Chicago (ORD), Phoenix (PHX), New York City (JFK), Los Angeles (LAX), Seattle-Tacoma (SEA), Washington, D.C. (DCA), and Miami (MIA).



American Airlines



LATIN AMERICA

2025 Revenue: \$6.4 Billion

In the Latin America segment, American Airlines transports people from locations in the U.S. to destinations in the Caribbean, Mexico, and Central and South America primarily through hubs in Dallas-Fort Worth (DFW), Charlotte (CLT), Miami (MIA), and New York City (JFK).



American Airlines



ATLANTIC

2025 Revenue: \$6.6 Billion

In the Atlantic segment, American Airlines transports people from locations in the U.S. to destinations in Europe, the Middle East, and Africa primarily through hubs in Philadelphia (PHI), Dallas-Fort Worth (DFW), Chicago (ORD), Phoenix (PHX), and New York City (JFK).



American Airlines



PACIFIC

2025 Revenue: \$1.4 Billion

In the Pacific segment, American Airlines transports people from locations in the U.S. to destinations in Asia and Australia primarily through hubs in Philadelphia (PHI), Dallas-Fort Worth (DFW), and Los Angeles (LAX), Seattle-Tacoma (SEA), Washington, D.C. (DCA), and Miami (MIA).



American Airlines



CARGO

2025 Revenue: \$839 Million

In the Cargo segment, American Airlines transports cargo throughout North America and to destinations in Asia, Europe, Africa, the Pacific, the Middle East, and Latin America.



American Airlines
Cargo

