No. 16-323

IN THE

Supreme Court of the United States

AVCO CORPORATION,

Petitioner,

v.

JILL SIKKELEE,

Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Third Circuit

BRIEF OF AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

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CORPORATE DISCLOSURE STATEMENT

Amicus curiae, Aerospace Industries Association of America, Inc. (AIA) is a not-for-profit trade association representing the interests of the aerospace and defense industry in the United States. It has no publicly owned parent corporation, subsidiary, or affiliate, nor has it issued shares or debt securities to the public. No publicly held company owns 10% or more of any stock in AIA.

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INTEREST OF THE *AMICUS CURIAE*[1]

Founded in 1919, AIA represents more than 300 of the nation's major aerospace and defense manufacturers and suppliers, producers of products and systems ranging from commercial aircraft, engines and avionics, to manned and unmanned defense systems and space and satellite communications systems. *Amicus curiae* lists its members in the appendix herein. Together with *amicus curiae* General Aviation Manufacturers Association, Inc. (GAMA), AIA represents most of the aviation manufacturers worldwide.

AIA's comprehensive expertise in aircraft design, manufacturing, and certification will prove useful to the Court in considering the questions regarding aviation manufacturing, design, and safety presented in this case. Its members' products reach all corners of the commercial aviation industry in America, and are counted on to safely move America's passengers across the skies on a daily basis.

The Federal Aviation Administration (FAA) certifies these commercial aviation products as

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[1] Counsel of record received timely notice of the intention to file this brief, and all parties have consented to its filing. Letters of consent to the filing of this brief executed by all parties have been lodged with the Clerk of the Court pursuant to Rule 37.2. In accord with Rule 37.6, *Amicus* states that no party or counsel for a party made a monetary contribution for the preparation or submission of this brief, and this brief was not authored, in whole or in part, by counsel for a party.

airworthy under federal regulatory safety standards, and AIA member companies work extensively with this agency through all phases of regulation covering safe design, manufacture, operation and airworthiness of their products. The Third Circuit Court of Appeals' decision has profound and sweeping implications for this regulatory framework, AIA, and the entire aviation industry.

SUMMARY OF ARGUMENT

Safe design and manufacture of aviation products are the cornerstone of America's aviation industry. For nearly a century, the federal government has recognized aviation safety as a paramount federal interest. This led Congress to express a clear intent for federal law to occupy the entire field of aviation safety by enacting the Federal Aviation Act and creating the Federal Aviation Administration (FAA) to serve as the exclusive regulator of aircraft design and manufacture. This clear congressional intent, rooted in the significant federal interest in aviation safety, is further reflected in the aviation industry's constant pursuit of advancing safety pursuant to uniform federal regulations, precisely as Congress intended. The Third Circuit Court of Appeals' decision disrupts this framework.

The Third Circuit Court of Appeals held that the scope of preemption by Congress and the FAA over the field of aviation safety is limited to "in-air operations," and that the FAA's air safety regulations governing aircraft design and manufacture will only preempt state law if there is a specific conflict. This decision directly contravenes longstanding federal policy aimed at uniformity and upends an entire industry's (and the flying public's) reliance on uniform air safety standards.

The comprehensive nature of the Federal Aviation Regulations (FARs), governing all aspects of America's aviation industry, warrants preemption. Upholding Congress's mandate for uniform aviation

safety standards is vital to the industry's task of advancing the significant federal interest in public safety. This Court should accordingly grant the petition and determine that the federal aviation regulations preempt the field of aviation design standards.

ARGUMENT

THE SIGNIFICANT, FEDERAL SAFETY INTEREST AT STAKE WARRANTS GRANTING THE PETITION.

The Third Circuit acknowledged that, for field preemption to apply, Congress must express a clear intent to preempt the area of law in question. *Sikkelee v. Precision Airmotive Corporation,* 822 F.3d 680, 687 (3d Cir. 2016). The Third Circuit failed to adequately consider, however, the significant federal interest in aviation safety underpinning the comprehensive regulations governing aircraft design and manufacture. In fact, Congress' significant interest in safety is precisely why it prescribed that design and manufacture of aviation products be governed solely by the FAA's regulations. Determining the scope of preemptive effect of this federal regulatory framework will further advance the public safety interest.

I. The federal government's paramount interest in aviation safety drove the comprehensive framework of federal regulations governing aircraft design and manufacture.

The federal interest in aviation safety and uniformity dates back nearly a century. Even prior to Congress' enactment of the current scheme under the Federal Aviation Act, Justice Jackson recognized the "intensive and exclusive" federal control of aviation under the Air Commerce Act of 1926 when he wrote that "[p]lanes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection…and under an intricate system of federal commands." *Northwest Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring). Justice Rehnquist later recognized that this led Congress to act with the "paramount substantive concerns" of federally regulating "all aspects of air safety…" when enacting the Federal Aviation Act of 1958. *City of Burbank v. Lockheed Air Terminal Inc.,* 411 U.S. 624, 644 (1973) (5-4 decision) (Rehnquist, J., dissenting) (disagreeing with the majority over whether the local noise rule at issue was preempted but agreeing with the majority that the act impliedly preempted all of aspects of air safety).

Thus in 1958, Congress expressed that "[i]t is essential that one agency of government, **and one agency alone**, be responsible for issuing safety regulations if we are to have timely and effective guidelines for safety in aviation." H.R. REP. NO. 85-2360 (1958), *reprinted in* 1958 U.S.C.C.A.N. 3741, 3761 (emphasis added). See also *Nat'l Fed'n of the Blind v. United Airlines Inc.*, 813 F.3d 718, 724 (9th Cir. 2016) (recognizing that "'preemptive intent is more readily inferred' in the field of aviation, because it is 'an area of the law where the federal interest is

so dominant.'") (quoting *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007)).

By promulgating the Federal Aviation Act and establishing what is now known as the Federal Aviation Administration (FAA), Congress codified the significance and primacy of the federal government's interest in aviation safety. Section 40101 of the Act (codifying the Federal Aviation Reauthorization Act of 1996), annunciates the federal government's policy and mandates that in carrying out the Act, the FAA shall consider the public interest of "assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce." 49 U.S.C.A. § 40101(d)(1) (West 2000). Similarly, section 40101(a) (regarding economic regulations), also mandates that the federal government shall recognize "the clear intent, encouragement, and dedication of Congress to further the highest degree of safety in air transportation and air commerce, and to maintain the safety vigilance that has evolved in air transportation and air commerce and has come to be expected by the traveling and shipping public." 49 U.S.C.A § 40101(a)(3).

This paramount safety interest drove Congress' mandate that the FAA prescribe the safety standards for design and manufacture of aircraft, aircraft engines, and propellers under 49 U.S.C.A. section 44701(a); which in turn authorized the FAA to promulgate the pervasive set of regulations that includes careful details for the design and manufacturing standards governing aviation products in the United States. *See* 49 U.S.C.A. § 44701; *see also* 14 C.F.R. pts. 23, 25, 27, 29, 33, 35.

The Third Circuit previously recognized that "aviation is unique among transportation industries in its relation to the federal government – it is the only one whose operations are conducted almost wholly within federal jurisdiction, and are subject to little or no regulation by States or local authorities." *Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 368 (3d Cir. 1999) (citing S. REP. NO. 85-1811 (1958)) ("the Federal Government bears virtually complete responsibility for the promotion and supervision of [the aviation] industry in the public interest."). In this respect, the Third Circuit's comparison of the aviation industry to the recreational boat industry falls short.

The Third Circuit's current holding that the FAA's design and manufacturing regulations do not preempt the field of design standards not only disregards that earlier recognition, it ignores the established federal policy and interest in aviation safety, and undermines the uniform regime that has been the foundation of America's aviation industry.

II. This uniform regulatory framework is vital to the safest and most dominant aviation industry in the world.

Commercial aviation is one of America's largest and most important industries. Modern life depends on a safe aviation industry. The design and manufacture of safe products is central to industry success. The commercial aviation industry accordingly works tirelessly to advance public safety and has achieved an extraordinarily high level of safety under FAA control.

The AIA estimates that in 2015, commercial aerospace manufacturing generated $276 billion in sales. Summary of *Industry Statistics - Financial,* AEROSPACE INDUSTRIES ASS'N., http://www.aia-aerospace.org/research-center/statistics/industry-data/financial/ (last visited Oct. 13, 2016). The U.S. aerospace and defense industry as a whole employed 1.7 million workers in 2015 and represented approximately 13 percent of the nation's manufacturing workforce. Summary of *Industry Statistics - Workforce,* AEROSPACE INDUSTRIES ASS'N., http://www.aia-aerospace.org/research-center/statistics/industry-data/workforce/ (last visited Oct. 13, 2016). As a segment of this broader industry, commercial aerospace alone employed over half a million workers (*see id*.) and generated $73 billion in value-added products and services in 2015. Summary of *Industry Statistics - Value Added,* AEROSPACE INDUSTRIES ASS'N., http://www.aia-aerospace.org/research-center/statistics/industry-data/value-added/ (last visited Oct. 13, 2016).

Aerospace and defense is America's leading net exporting industry, generating a record trade surplus of $81 billion in 2015 and growing at an annualized growth rate of 8.2% over the past five years. Summary of *Industry Statistics - Foreign Trade,* AEROSPACE INDUSTRIES ASS'N., http://www.aia-aerospace.org/research-center/statistics/industry-data/foreign-trade/ (last visited Oct. 13, 2016).

These statistics make it clear that the aviation industry generates tremendous economic benefit for the United States. As highlighted by Oxford

Economics in its Economic Benefits from Air Transport in the US study from 2011, "the US has the world's largest aviation manufacturing sector" and "[t]he connections created between cities and markets represent an important infrastructure asset that generates benefits through enabling foreign direct investment, business clusters, specialization and other spill-over impacts on an economy's productive capacity." Oxford Economics, *Economic Benefits from Air Transport in the U.S.*, p. 4 - 5 (2011), https://www.iata.org/policy/Documents/Benefits-of-Aviation-US-2011.pdf.

Ultimately, "[t]he aviation sector contributes $669.5 billion in Gross Value Added (GVA) to the US, equivalent to 4.9% of the US economy"; it "supports 9.3 million jobs in the US"; and in 2010, it paid "over $57.4 billion in tax including income tax receipts from employees, social security contributions and corporation tax levied on profits." *Id*.

In addition to these powerful domestic economic figures, international trade within the aviation industry depends on the primacy of federal law. Article II of the Constitution empowers the federal government, not states, to enter into treaties and agreements with foreign nations. *See* U.S. Const. art. II, § 2, cl. 2; *see also Crosby v. National Foreign Trade Council*, 530 U.S. 363, 381 (2000) ("This clear mandate and invocation of exclusive national power belies any suggestion that Congress intended the President's effective voice to be obscured by state or local action."). Currently, there are 48 bilateral treaties with foreign nations, including the European

Union, permitting reciprocal certification of products manufactured and certified by the FAA when exported to signatory countries. *See* FAA, *Bilateral Agreement Listing*, http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/ (last visited Oct. 13, 2016). These bilateral agreements recognize the FAA's regulatory standards as preeminent in governing U.S. safety standards. *See, e.g.*, Agreement on Cooperation in the Regulation of Civil Aviation Safety, U.S.-E.U, art. 2, Jun. 30, 2008, T.I.A.S. 11-501.

America's aviation safety record demonstrates good reason for such treaties: according to AIA member company Boeing's in-depth study of major aviation accidents, scheduled commercial passenger operations have demonstrated a fatal accident rate of 0.23 accidents per million departures (with 192.8 million departures flown) over the 10-year period between 2006 - 2015. *See Statistical Summary of Commercial Jet Airplane Accidents, Worldwide Operations*, 1959 – 2015, 18 (July 2016), http://www.boeing.com/resources/boeingdotcom/company/about_bca/pdf/statsum.pdf. From 1959 – 2015, North American operators have had 182 fatal accidents, compared to 437 in the rest of the world. *Id.* at 14. Only 11 North American accidents occurred in the last decade since 2006 (versus 54 in the rest of the word). *Id.*

With one of America's strongest industries dependent on the federal regulatory framework arising from the robust Federal Aviation Act, as discussed in the following section, the Third Circuit's

decision, and the uncertainty presented by division in the circuits, threatens to interfere with and disrupt the FAA's industry oversight and control.

III. The Third Circuit's holding disrupts the FAA's effective regulatory control.

Given the federal government's significant interest in public safety, the FAA and the aviation industry have worked interdependently to utilize engineering expertise to promote safety under the uniform and pervasive federal regulatory framework concerning design, manufacture, and certification of aircraft and aircraft components. The Court of Appeals' decision disrupts the FAA's control under this regime. Without a determination from this Court, state juries, judges, and legislatures are free to create the very patchwork of varying safety standards that the Federal Aviation Act sought to prevent. Because the commercial aviation industry relies on a *uniform* federal regulatory framework to advance public safety, the practical effect of the Third Circuit's decision is profound.

The Third Circuit itself recognized that the FAA's certification process is "intensive and painstaking." *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 684 (3d. Cir. 2016). With respect to a product's design stage (type certification), wide-body aircraft manufacturers "might submit [to FAA] upward of 300,000 drawings and 2,000 engineering reports, apart from ground tests and flight tests" for approval. *Id.* AIA member company Boeing's *amicus* brief to the Third Circuit in this matter highlighted that "[f]or major new aircraft, type certification is a

rigorous process that takes several years and thousands of demonstrations to show compliance with the thousand-plus pages of regulations of 14 C.F.R. pt. 25 and the related studies and guidance materials that also apply." Brief for the Boeing Co. and Airbus Americas, Inc. as Amici Curiae Supporting Rehearing En Banc at 5, *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 684 (3d. Cir. 2016) (No. 14-4193), 2016 WL 3035383 at *15.

Boeing worked with the FAA for eight years to certify its 787-8 airplane design under this intensive process. *Id.* To certify an aircraft like Boeing's 787-8, "[t]he airplane is analyzed and tested from the bottom up—beginning with components, through systems, to the structure, and culminating with the entire airplane." *Id.; see also* 14 C.F.R. pt. 25 (Airworthiness Standards: Transport Category Airplanes).

As another recent example, General Electric Aviation's Passport engine for business jets accumulated more than 2,400 hours and 2,800 cycles in ground and flight testing during its type certification process. *See GE Passport Achieves FAA Certification for Business Jet Applications*, GE AVIATION, (May 23, 2016), http://www.geaviation.com/press/business_general/bus_20160523.html. "By the time the Passport [engine] enters into service, it will have accumulated the equivalent of 10 years of flying for a [business jet] operator with more than 4,000 hours and 8,000 cycles." *Id.* Such magnitude of time and engineering analysis demonstrates the comprehensiveness of the federal regulations.

As the FAA noted in its *amicus* brief solicited by the Third Circuit, the issuance of a type certificate "involves the analysis of vast amounts of information, including data, drawings, and other details about the aircraft or part for which an applicant seeks approval." Letter Brief from the Dep't of Transp. and the FAA as Amici Curiae to Marcia M. Waldron, Clerk of the Court, United States Court of Appeals for the Third Circuit (Sept. 2, 2015), *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 684 (3d. Cir. 2016) (No. 14-4193), 2015 WL 5665724 at *14. "The type certification process is an exhaustive, iterative process" involving multiple stages and collaborative input from both the FAA and the applicant. *Id*.

The process encompasses five phases, including Conceptual Design, Requirements Definition, Compliance Planning, Implementation, and Post-Certification. 14 C.F.R. pt. 21; U.S. Dep't of Transp., FAA Order 8110.4C, *Type Certification* (Mar. 28, 2007). A collaborative relationship between industry and the FAA build on the framework of regulatory compliance is crucial to ensuring safety throughout the process, which often spans upwards of a decade.

As part of the FAA's control over, and philosophy to engage, engineering expertise to advance safety during the process, the FAA, in conjunction with GAMA and AIA, has published *The FAA and Industry Guide to Product Certification* (the "FAA Guide"), describing these phases.

Each phase encompasses a series of tasks, requisite information, "deliverables" (i.e., documents and information that are prerequisites for subsequent Phases and must be completed before entering the next Phase, unless otherwise mutually agree by the FAA and applicant), and mandatory criteria for success. *The FAA and Industry Guide to Product Certification* (2d ed. 2004), 7-11, *available at* https://www.faa.gov/aircraft/air_cert/design_approvals/media/CPI_guide_II.pdf.

The FAA Guide identifies two primary documents that advance this multi-phase certification process – the Partnership Safety Plan (PSP) and Project Specific Certification Plan (PSCP). *Id.* at 1. In establishing the PSP, the applicant and the FAA "reach a clear common understanding of their respective responsibilities for the design and production definition and the certification requirements." *Id.* at 13. The working relationship between the FAA and the applicant is the foundation for the certification process. *Id.* at A1-30. The PSP further requires that the FAA and the applicant establish principles and procedures for early identification of critical issues and early planning, and outline periodic management program reviews by the FAA and the applicant. *Id.* at A1-30 – A1-31. The parties must also establish clear communication and coordination paths, define the scope of delegation to closely integrate the FAA with the applicant, establish a production quality system evaluation, and delineate continuous improvement measures to resolve inevitable issues and measure performance benchmarks. *Id.* at A1-31 – A1-36.

Similarly, in developing the PSCP, the FAA and the applicant "[c]oordinate and direct the certification team's effort and ensure things are kept moving to achieve the Product Certification objectives." *Id.* at 14. The PSCP expands the process further, outlining 27 categories of information and documents required to be submitted, which in turn make up the thousands upon thousands of test flights and flight hours advancing the certification process under the hundreds of applicable regulations. *Id.* at A2-40. The FAA retains sole authority to approve these documents and sole approval authority at every step of the certification process. *See* Letter Brief of FAA, 2015 WL 5665724 at *15.

In addition to the PSP and PSCP, the FAA Guide identifies eight categories of "Key Players" vital to each phase of type certification, including, for example, the FAA and the applicant's Management; FAA and the applicant's Project Managers; FAA Standards Staff Project Officer; FAA Engineers, Inspections and Flight Test Pilots; FAA Chief Scientific and Technical Advisor; and FAA Aircraft Evaluation Group. *The FAA Guide* at 6.

As part of several "Key Player" groups, the FAA may further immerse itself within the applicant by designating such organization, or certain of its employees, as FAA representatives to "perform specific functions on behalf of the [FAA] related to engineering, manufacturing, operations, airworthiness, or maintenance." 14 C.F.R. § 183.41(a). This process enables the FAA to further utilize a manufacturer's knowledge base and

engineering expertise throughout the iterative process. *See* 14 C.F.R. § 183.1(a).

Several types of employee-representatives or third party/external experts may be designated, spanning the entire "cradle-to-grave" life cycle of the product and regulatory activity. Relevant to design certification, 14 C.F.R. § 183.29 permits a company to designate employees as Designated Engineering Representatives (DER), covering a comprehensive set of categories of engineering design, testing, and conformance analysis. *See* 14 C.F.R. § 183.29(a) - (i).

While this practical tool permits the FAA to utilize additional engineering expertise held within the aviation industry's knowledge base, "no matter what role a manufacturer plays in the type-certification process, the decision to approve the type design ultimately rests with the FAA." *See* Letter Brief of FAA, 2015 WL 5665724 at *15.

Furthering this point, the regulations ensure a designated representative's autonomy while acting on behalf of the FAA. An applicant with designees must "comply with the procedures contained in its approved procedures manual; give [designees] sufficient authority to perform the authorized functions [as FAA representatives]; ensure that no conflicting non-[designee] duties or other interference affects the performance of authorized functions by [designees]; cooperate with the [FAA] in [its] performance of oversight of the [applicant] and [designees]; and notify the [FAA] of any change that could affect the [applicant's] ability to continue to

meet the requirements of this part within 48 hours of the change occurring." 14 C.F.R. § 183.57.

The FAA also requires an application demonstrating how a designee satisfies qualification requirements with sufficient facilities, resources, and experience, and describing the company's organizational structure (existing and proposed). 14 C.F.R. §§ 183.43, 183.47. The manufacturer or DER applicant must also submit a proposed procedures manual for FAA approval, covering fifteen categories of activity required to ensure the utmost level of safety in carrying out its functions. *See* 14 C.F.R. § 183.53.

Thus, even where the FAA utilizes designated representatives, it retains sole control over the entire design approval process. Simply put, the industry remains answerable to the FAA at all times and relies on the strong working relationship with the FAA in order to comply with the painstaking certification process and to advance public safety.

The Third Circuit's decision disrupts this carefully constructed framework, with the potential to render an applicant's years of work and thousands of tests undertaken for design certification virtually useless. Placing judgment of safety in the hands of state judges, juries, and state legislatures means the FAA is no longer the arbiter of safety for an aerospace company manufacturing its products in the United States. The Third Circuit's decision, perpetuating the split of authority, leaves this essential and practical relationship by the wayside, and contravenes the premise that engineering

expertise is vital to enforcement of safety. Determining the scope of preemptive effect of the FAA's regulations will resolve that disruption, and advance the public safety interest at stake.

CONCLUSION

This Court should grant the petition for *certiorari*.

Respectfully submitted,

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October 14, 2016

APPENDIX

APPENDIX

List of Aerospace Industries Association of America, Inc. Member Companies

Source: http://www.aia-aerospace.org/membership/our-members/ (last accessed Oct. 13, 2016)

Full Members

- 3M Company
- AAR Corporation
- Accenture
- Accurus Aerospace Corporation, LLC
- Acutec Precision Machining
- ACUTRONIC USA Inc.
- Aerion Corporation
- Aero-Mark, LLC
- Aerojet Rocketdyne
- Aerospace Exports Incorporated
- AGC Aerospace & Defense
- Aireon LLC
- AirMap
- Alcoa Defense
- Allied Telesis, Inc.
- American Pacific Corporation
- Analytical Graphics, Inc.
- Apex International Management Co.
- Ascent Manufacturing, Inc.
- Astronautics Corporation of America
- Astronics Corporation
- Athena Manufacturing, LP
- Aurora Flight Sciences
- AUSCO, Inc.
- Avascent

- B&E Group, LLC
- BAE Systems
- Ball Aerospace & Technologies Corp.
- Barnes Group
- Belcan Corporation
- Benchmark Electronics, Inc.
- Bombardier Aerospace
- Boston Consulting Group
- C4 Associates, Inc.
- CADENAS PARTsolutions
- CAE
- Camcode Division of Horizons, Inc.
- Capgemini
- CDI Corporation
- Celestica, Inc.
- Click Bond, Inc.
- Cobham
- Computer Sciences Corporation (CSC)
- CPI Aerostructures
- Crane Aerospace & Electronics
- Cubic Corporation
- Curtiss-Wright Corporation
- Cyient Ltd.
- Cytec Industries, Inc.
- Deloitte Consulting LLP
- Denison Industries
- Ducommun Incorporated
- DuPont Company
- Eaton Corporation
- Elbit Systems of America
- Embraer Aircraft Holding, Inc.
- EPS Corporation
- EPTAM Plastics
- Ernst & Young LLP
- Esterline Technologies

- Exostar LLC
- Facebook
- Flex
- Flight Safety International, Inc.
- Fluor Corporation
- FS Precision Tech, LLC
- FTG Circuits, Inc.
- General Atomics Aeronautical Systems Inc.
- General Dynamics Corporation
- General Electric Aviation
- GKN Aerospace North America
- Harris Corporation
- HCL America, Inc.
- HEICO Corporation
- Hexcel Corporation
- Honeywell Aerospace
- HP Enterprise Services, Aerospace
- Huntington Ingalls Industries
- IBM Corporation
- Information Services Group (ISG)
- Iron Mountain
- J Anthony Group, LLC
- Jabil Defense & Aerospace Services, LLC
- Kaman Aerospace Corporation
- KPMG, LLP
- Kratos Defense & Security Solutions, Inc.
- L-3 Communications Corporation
- LAI International, Inc.
- Lavi Systems, Inc.
- Leidos Corporation
- LMI Aerospace, Inc.
- Lockheed Martin Corporation
- Lord Corporation
- LS Technologies, LLC (LST)
- MAG (Momentum Aerospace Group)

- ManTech International Corporation
- Marotta Controls, Inc.
- Meggitt USA
- Mercury Systems
- Micro-Coax, Inc.
- Microsemi Corporation
- Moog, Inc.
- MTorres America
- National Technical Systems (NTS)
- NEO Tech
- New England Airfoil Products, Inc.
- NORDAM
- Northrop Grumman Corporation
- NYLOK, LLC
- Omega Aerial Refueling Services, Inc.
- O'Neil & Associates, Inc.
- Orbital ATK
- Oxford Performance Materials, Inc.
- Pacific Design Technologies, Inc.
- Park Ohio
- Parker Aerospace
- Plexus Corp.
- PPG Aerospace-Sierracin Corporation
- PTC
- PWC Aerospace & Defense Advisory Services
- Primus Technologies Corporation
- Raytheon Company
- Rhinestahl Corporation
- RIX Industries
- Rockwell Collins
- Rolls-Royce North America, Inc.
- Salesforce
- SAP America, Inc.
- Seal Science, Inc.
- Securitas Critical Infrastructure Services, Inc.

- Siemens PLM Software
- Sierra Nevada Corporation, Space Systems
- SITA
- Spacecraft Components Corporation
- Sparton Corporation
- Spirit AeroSystems
- Sunflower Systems (Annams Systems Corporation)
- Tech Manufacturing, LLC
- Textron, Inc.
- The Boeing Company
- The Padina Group (TPG), Inc.
- Therm, Inc.
- TIP Technologies
- TriMas
- Triumph Group, Inc.
- United Parcel Service
- United Technologies Corporation
- Universal Protection Service
- Vectrus
- Verify, Inc.
- Verizon Enterprise Solutions
- Virgin Galactic, LLC
- VogelHood, LLC
- Wesco Aircraft Hardware Corporation
- Woodward, Inc.
- Xerox Corporation

Associate Members

- 180 Skills
- Acme Industrial Company
- ADI American Distributors, Inc.
- Aeronautical Systems, Inc.
- Aerospace Alloys, Inc.

- AeroVironment, Inc.
- Air Industries Group
- Airfasco Industries, Inc.
- Alarin Aircraft Hinge
- Alcoa Fastening Systems & Rings
- Allen Aircraft Products, Inc.
- Altemp Alloys, Inc.
- AMI Metals, Inc.
- Anaheim Precision Manufacturing
- Anoplate
- Arkwin Industries, Inc.
- Arnold Magnetic Technologies-Precision Thin Materials Division
- Arrow Electronics, Inc.
- Arundel Machine Tool Co., Inc.
- Asia-Pacific Engineering Consulting Services, LLC
- Astro-Med, Inc.
- Astute Electronics, Inc.
- ATC Aerospace
- ATI
- Aurora Custom Machining, Inc.
- Automatic Screw Machine Products Company
- Avnet Electronics Marketing, Inc.
- Banneker Industries, Inc.
- BE&K Building Group
- Boyle Ogata Bregman
- Breeze-Eastern Corporation
- Brogdon Machine, Inc.
- BRPH Architects Engineers
- BTC Electronic Components, Inc.
- Butler America
- CDG, A Boeing Company
- Celltron, Inc.
- CIT Corporate Finance, Aerospace & Defense

- Co-Operative Industries Defense, LLC
- Connecticut Center For Advanced Technology, Inc. (CCAT)
- Consolidated Industries, Inc.
- Consolidated Precision Products
- Craig Technologies
- Crestwood Technology Group
- CS Communications & Systemes Canada
- Dassault Systemes
- Dayton T. Brown, Inc.
- DRS Technologies
- EEI Manufacturing Services
- EL-COM
- Electralloy
- Embry-Riddle Aeronautical University
- EnerSys
- Enterprise Florida, Inc.
- ETA Global, Inc.
- Etteplan
- Exotic Metals Forming Company, LLC
- Exxelia Group
- Fairmont Consulting Group
- Ferco Aerospace Group
- Flatirons Solutions, Inc.
- FLIR
- Freedom Alloys
- Frontier Electronic Systems Corporation
- Fujitsu Glovia, Inc.
- Future Metals, LLC
- GDCA
- Global Partner Solutions
- General Motors
- G.S. Precision, Inc.
- GSE Dynamics, Inc.
- H&S Swansons' Tool Company

- Hangsterfer's Laboratories, Inc.
- HDL Research Lab, Inc.
- Hercules Heat Treating Corporation
- Hi-Temp Insulation Inc.
- Hoar Program Management (HPM)
- Houlihan Lokey
- Hughes Bros. Aircrafters, Inc.
- Impresa Aerospace, LLC
- Indiana Economic Development Corporation
- Industrial Metals Intl., Ltd.
- Integrated Support Systems, Inc.
- InterConnect Wiring
- Janes Capital Partners
- Jones Day
- KAPCO Global
- Kellstrom Defense, A Merex Group Company
- Khaitan & Co.
- Kitco Defense
- Kulite Semiconductor Products, Inc.
- Landstar Transportation Logistics
- Level 3 Inspection LLC
- LISI Aerospace
- LMI (Logistics Management Institute)
- Materion Brush, Inc.
- Meyer Tool, Inc.
- Mid-Atlantic Aviation Partnership
- Mid-State Aerospace, Inc.
- Millitech, Inc.
- Montana Metal Products, LLC
- Morris Machine Company, Inc.
- National Machine Group
- Norton/Saint-Gobain
- Oerlikon Balzers
- Ohio Aerospace Institute
- PARPRO

- PASSUR Aerospace
- Pattonair
- Paulo
- PCX Aerostructures
- Pentecom, LLC
- Perillo Industries, Inc.
- Phillips Screw Company
- Piedmont Triad Airport Authority
- Plymouth Engineered Shapes
- Pointe Precision, Inc.
- Precision Gear, Inc.
- Precision Tube Bending
- Primus Aerospace
- R&D Specialty Manco
- Radant Technologies, Inc.
- RAM Company, Inc.
- Renaissance Strategic Advisors II, LLC
- Rocker Industries
- RUAG Aerostructures
- Safran USA
- Samuel Aerospace Metals
- Scot Forge Corporation
- SDL (formerly XyEnterprise)
- SEAKR Engineering
- Sechan Electronics, Inc.
- SELEX Galileo Inc.
- Senior Aerospace
- Service Steel Aerospace
- Servotronics, Inc.
- SIFCO Industries, Inc.
- Special Aerospace Services, LLC
- Spika Design & Manufacturing
- Spincraft
- Spirit Electronics
- SSOE Group

- Stanley Engineered Fastening
- Stroco Manufacturing, Inc.
- Supply Dynamics, LLC
- Tactair Fluid Controls, Inc.
- Tata Consultancy Services
- TechSolve, Inc.
- TECT
- TEK Precision Company, Ltd.
- Telephonics Corporation
- TEVET, LLC
- Thales USA, Inc.
- The Lundquist Group
- Thermacore, Inc.
- ThyssenKrupp Aerospace
- Tiodize Co., Inc.
- Torotel Products, Inc.
- TSI Plastics, Inc.
- TTI Inc.
- TTM Technologies, Inc.
- Turbine Controls Inc. (TCI)
- TW Metals
- Two Roads Professional Resources, Inc.
- UT College of Business Aerospace & Defense Portfolio
- Valbruna Stainless
- VMH International
- W. L. Gore and Associates, Inc.
- Whitcraft, LLC
- Windings, Inc.
- WSI Industries
- X-Ray Industries, Inc.
- Yarde Metals