

# Business Aviation Index

Q4 2019





The JSSI Business Aviation Index tracks and reports on the global flight activity and utilization of approximately 2,000 business aircraft, including jets, turboprops and helicopters. The report calculates the average flight hours flown per aircraft on a monthly basis and organizes this data into several key categories.

The JSSI Business Aviation Index is broken into four primary categories: Industry, Aircraft Type, Geographical Region and Aircraft Age. The data presented in this report is subject to the core variables in our business.

These variables include, but are not limited to: accurate and timely flight hour reporting; customer addition and attrition; fleet demographic changes, such as fleet size or aircraft class; and any geopolitical events that may inhibit timely or accurate data collection.

If you would like to discuss any of the data points or results in more detail, or would like to use this data in your reports, please contact:

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# troduction

For 30 years, Jet Support Services, Inc. (JSSI), has been the leading independent provider of maintenance programs to the business aviation industry, covering virtually all makes and models of business aircraft, engines, and APUs.

JSSI provides customers with comprehensive, flexible and affordable financial programs and tools for managing the often unpredictable costs of operating and maintaining nearly all types of turbine powered aircraft, including business and commercial jets, turboprops and helicopters. JSSI serves customers globally and manages maintenance services through its worldwide infrastructure of certified technical advisors.

JSSI has always been deeply committed to providing clients and the industry with the highest standard of service and excellence. The JSSI team adds further value by developing the most innovative products and services and expanding into new markets. JSSI publishes a quarterly Business Aviation Index to track flight hours and financial performance of business and commercial aircraft by region, industry and cabin type.

Flight hour activity provides powerful and unique insights into the state of the global economy. The information provided in this report could include technical or other mistakes or inaccuracies. JSSI makes no representations regarding the quality, accuracy, completeness or suitability of the materials on this or any other report, and disclaims any duty to keep this information current or accurate.





Overall

ndustry

19 Region

27 Aircraft Type

29 Aircraft Age

31 Operator Type



# Q4 2019 Results







Healthcare QoQ Increase



Middle East YoY Increase



Consumer Goods
QoQ Increase



Europe YoY Increase



Asia Pacific QoQ Increase

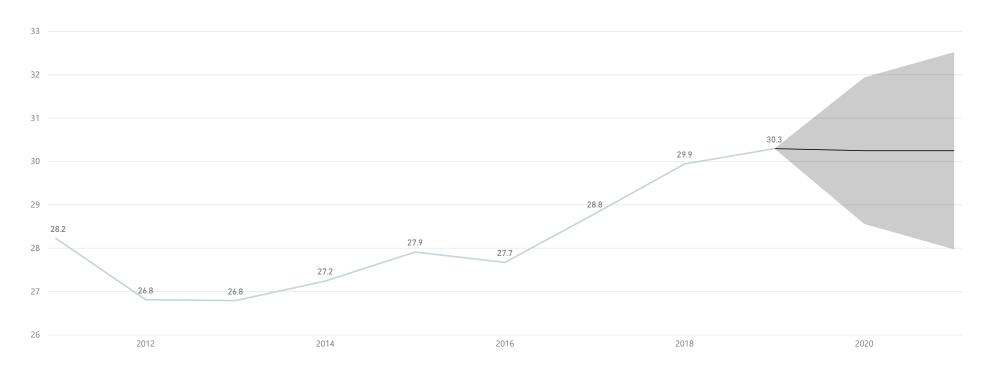


Aviation YoY Decrease



# AVERAGE FLIGHT HOURS

QoQ -3.0% YoY 3.1% YTD 1.2%





QoQ YoY YTD

# FLIGHT HOUR ACTIVITY QoQ

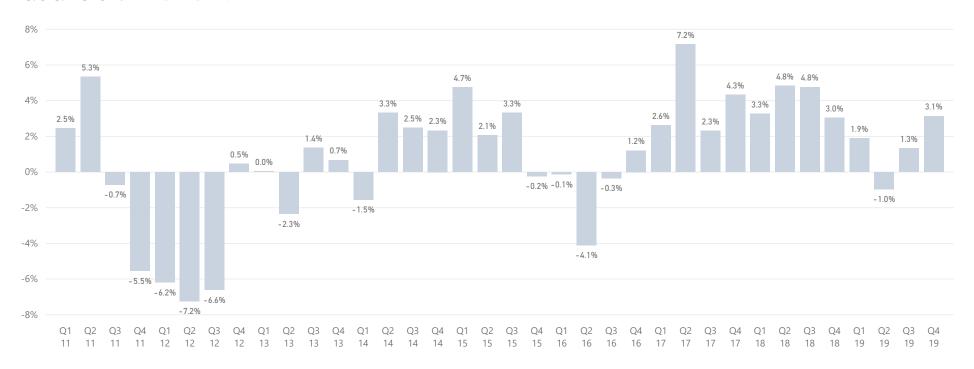




QoQ YoY YTD

# FLIGHT HOUR ACTIVITY YOY

QoQ -3.0% YoY 3.1% YTD 1.2%

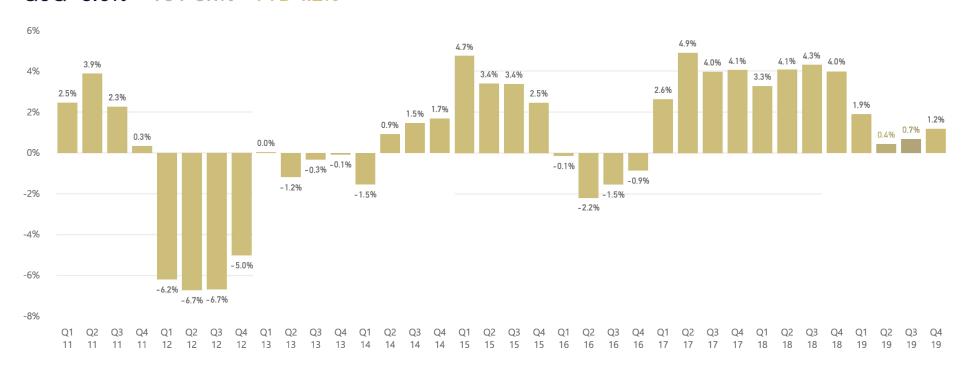




QoQ YoY YTD

# FLIGHT HOUR ACTIVITY YTD

QoQ -3.0% YoY 3.1% YTD 1.2%





# FLIGHT HOUR ACTIVITY BY INDUSTRY





#### **Aviation**

Companies in this industry include those with a primary purpose to generate revenue through private charter or aviation-related services It also includes companies with a core focus in aviation manufacturing, design or development.





#### **Business Services**

Companies in this industry include marketing and advertising, consulting, legal services, logistics and shipping, human resources, staffing, leasing, security, outsourcing, and facility management.





#### Construction

Companies in this industry include residential and commercial construction, bridge and roadway construction, excavations, demolitions, and large-scale services supporting the construction industry.



#### **Consumer Goods**

Companies that relate to items purchased by individuals and includes companies involved with food production, packaged goods, clothing, beverages, automobiles and electronics.





YoY \_\_\_\_\_\_ 21.8%

YTD 6.2%

YoY -4.9% YTD -1.2%

#### **Financial Services**

Companies that manage money, such as credit unions, banks, credit-card companies, insurance companies, accountancy companies, consumerfinance companies, stock brokerages, and investment funds.



#### Healthcare

Companies that provide goods and services that are used to treat patients, including hospitals, pharmaceutical companies, rehabilitation companies, or other service providers directly related to the medical system.



#### Manufacturing



Companies that engage in the mechanical, physical, or chemical transformation of materials, substances, or components that support the production of a final product.





#### **Power and Energy**

Companies that produce coal, oil, natural gas or electricity, as well as other service providers directly related to the creation or development of power and energy.





#### Real Estate

Companies that consist of land and building ownership and companies involved in the buying, selling, or leasing of retail or personal properties.

















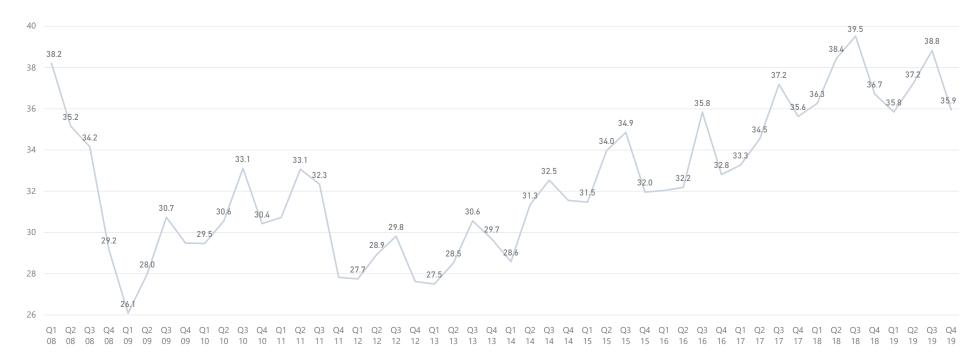




### **AVIATION**

QoQ -7.4% YoY -2.1% YTD -1.8%

Companies in this industry include those with a primary purpose to generate revenue through private charter or aviation-related services. It also includes companies with a core focus in aviation manufacturing, design or development.























### **BUSINESS SERVICES**

QoQ -5.0% YoY -0.9% YTD -1.6%

Companies in this industry include marketing and advertising, consulting, legal services, logistics and shipping, human resources, staffing, leasing, security, outsourcing, and facility management.



Q1 Q2 Q3 Q4 Q1 Q2

















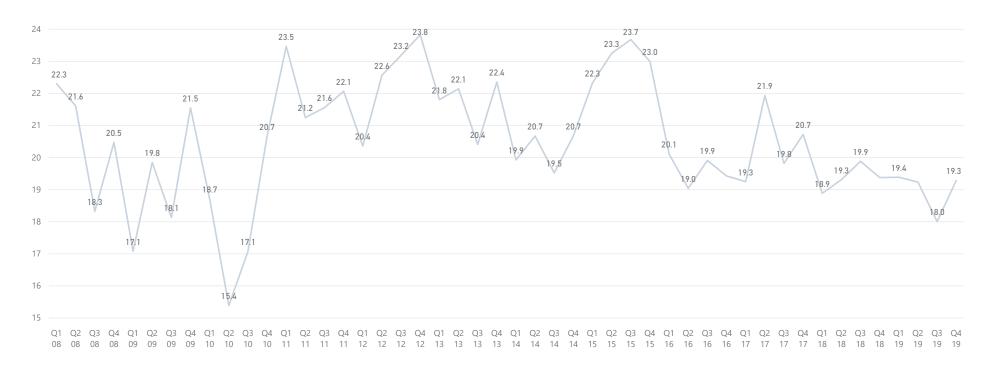




### **CONSTRUCTION**

QoQ 7.1% YoY -0.5% YTD -2.1%

Companies in this industry include residential and commercial construction, bridge and roadway construction, excavations, demolitions, and large-scale services supporting the construction industry.



















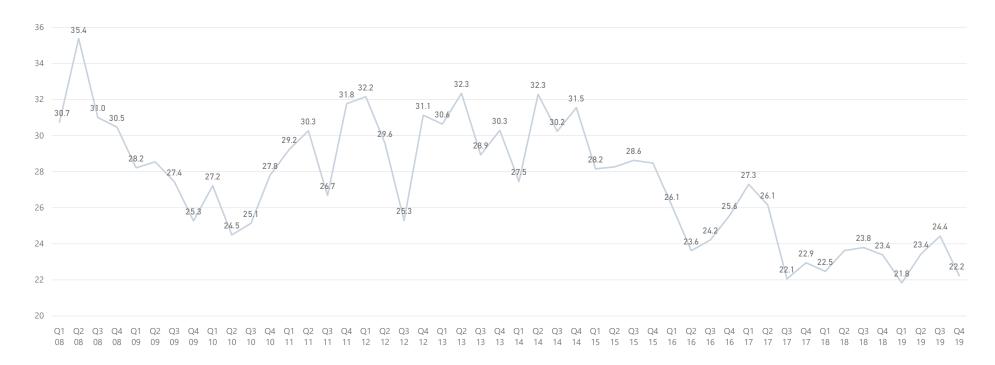




### **CONSUMER GOODS**

QoQ -9.0% YoY -4.9% YTD -1.2%

Companies that relate to items purchased by individuals and includes companies involved with food production, packaged goods, clothing, beverages, automobiles and electronics.























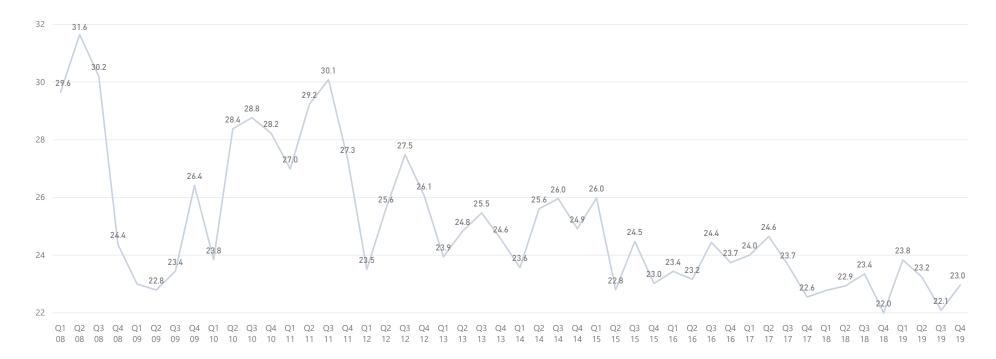
### FINANCIAL SERVICES

QoQ 3.9%

YoY 4.4%

YTD 1.3%

Companies that manage money, such as credit unions, banks, credit-card companies, insurance companies, accountancy companies, consumerfinance companies, stock brokerages, and investment funds.



















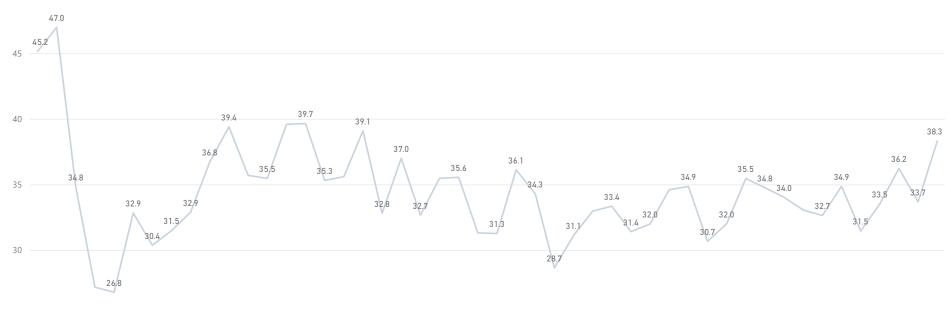




### **HEALTHCARE**

QoQ 13.7% YoY 21.8% YTD 6.2%

Companies that provide goods and services that are used to treat patients, including hospitals, pharmaceutical companies, rehabilitation companies, or other service providers directly related to the medical system.



















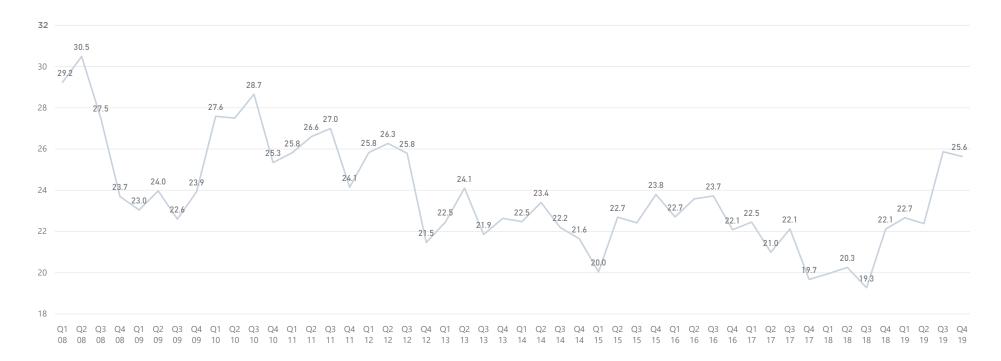




### **MANUFACTURING**

QoQ -0.9% YoY 15.9% YTD 17.2%

Companies that engage in the mechanical, physical, or chemical transformation of materials, substances, or components that support the production of a final product.























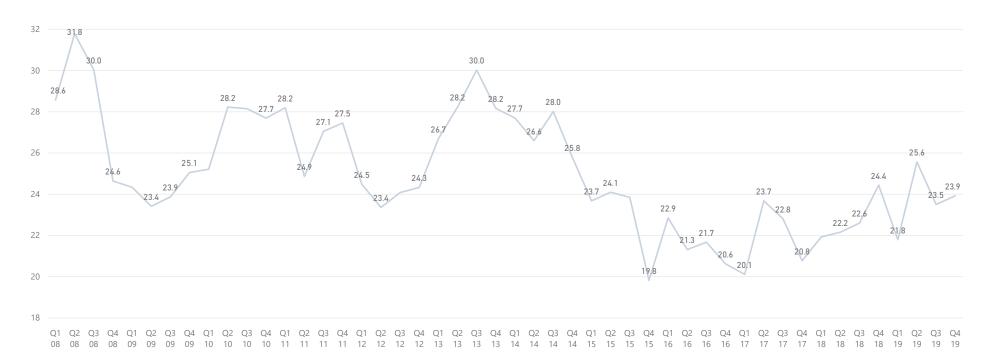
### **POWER AND ENERGY**

QoQ 1.8%

YoY -2.1%

YTD 3.9%

Companies that produce coal, oil, natural gas or electricity, as well as other service providers directly related to the creation or development of power and energy.



















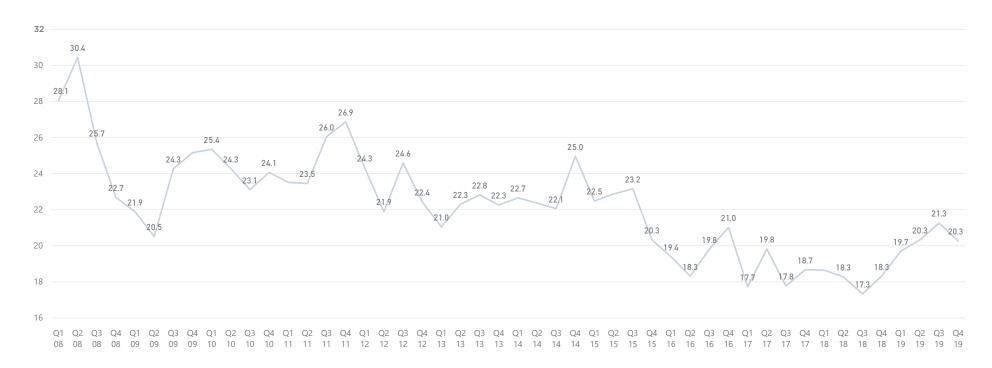




### **REAL ESTATE**

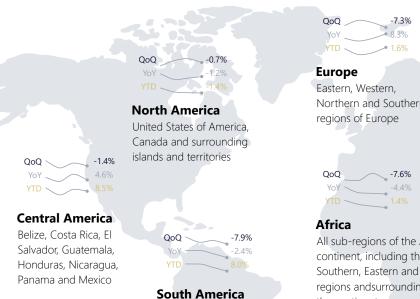
QoQ -4.7% YoY 10.6% YTD 12.4%

Companies that consist of land and building ownership and companies involved in the buying, selling, or leasing of retail or personal properties.



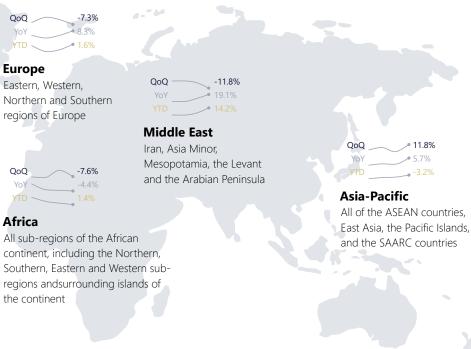


### FLIGHT HOUR ACTIVITY BY REGION



Venezuela, Columbia, Ecuador, Peru, Bolivia, Paraguay, Brazil, Argentina, Chile, Uruguay and

surrounding islands





Asia-Pacific

Central America

Europe

Middle East

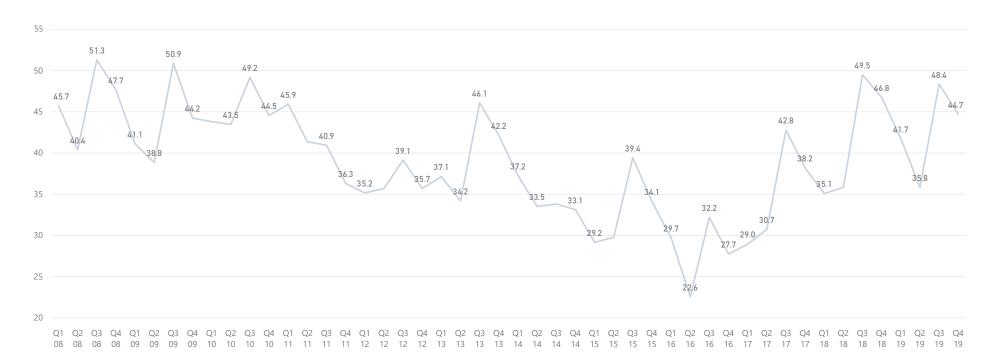
North America

South America

### **AFRICA**

QoQ -7.6% YoY -4.4% YTD 1.4%

All sub-regions of the African continent, including the Northern, Southern, Eastern and Western sub-regions and surrounding islands of the continent



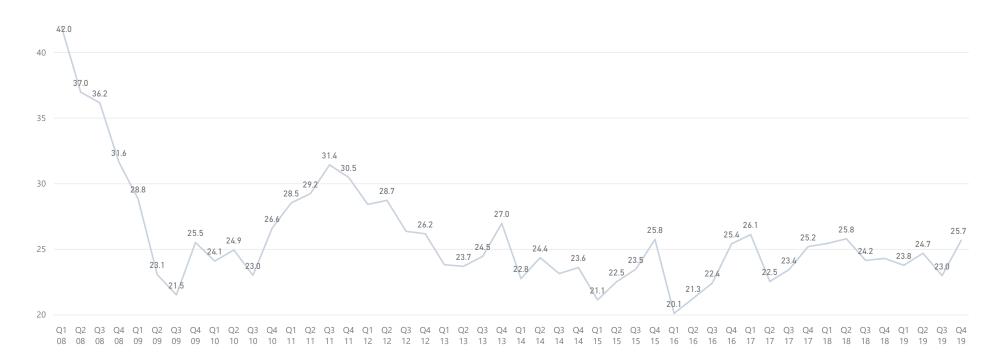


Asia-Pacific

### **ASIA-PACIFIC**

QoQ 11.8% YoY 5.7%

All of the ASEAN countries, East Asia, the Pacific Islands, and the SAARC countries





Asia-Pacific

Central America

Europe

Middle East

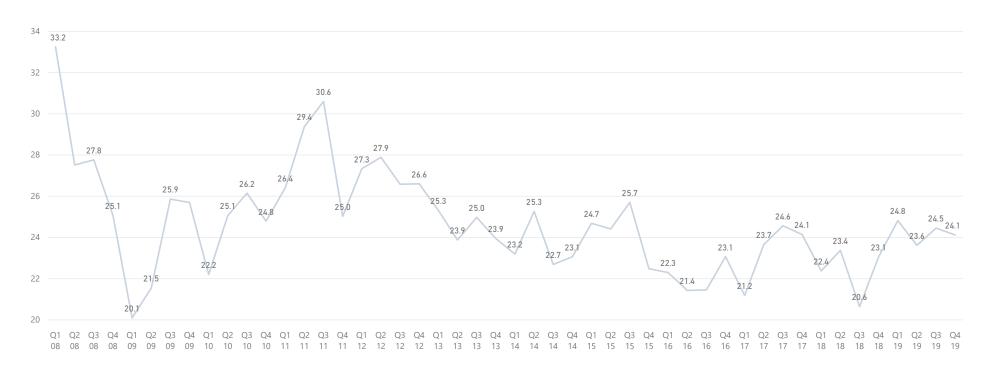
North America

South America

#### **CENTRAL AMERICA**

QoQ -1.4% YoY 4.6% YTD 8.5%

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Mexico





Asia-Pacific

Central America

Europe

Middle East

North America

South America

### **EUROPE**

QoQ -7.3% YoY 8.3% YTD 1.6%

Eastern, Western, Northern and Southern regions of Europe





Asia-Pacific

Central America

Europe

Middle East

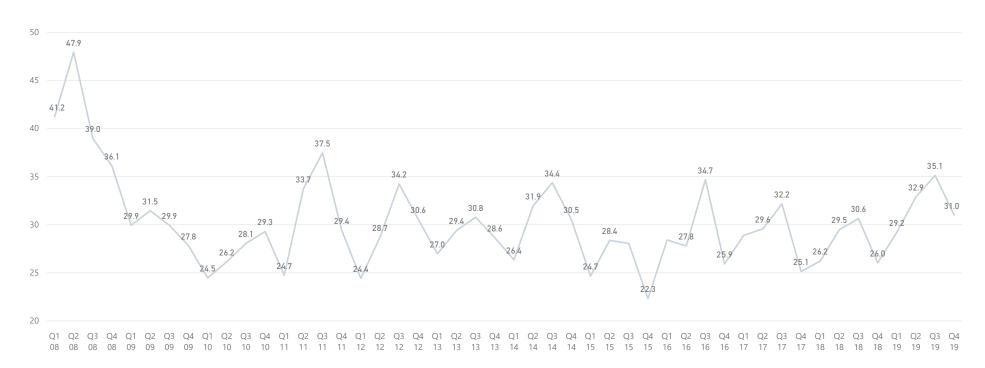
North America

South America

### MIDDLE EAST

QoQ -11.8% YoY 19.1% YTD 14.2%

Iran, Asia Minor, Mesopotamia, the Levant and the Arabian Peninsula





Asia-Pacific

Central America

Europe

Middle East

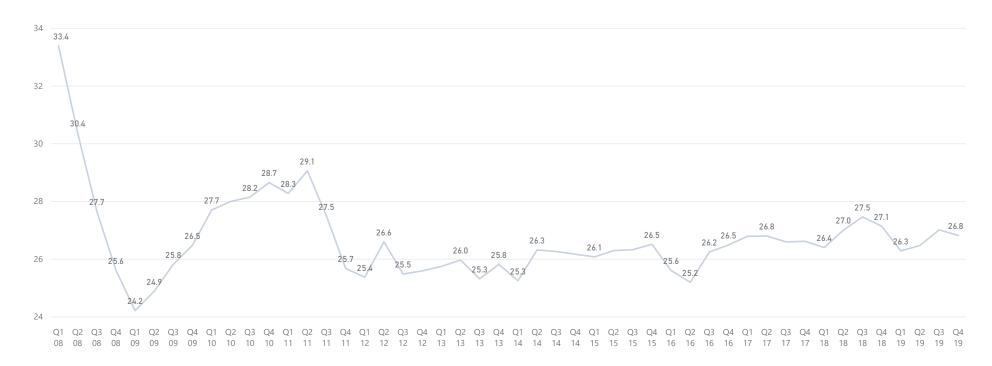
North America

South America

### **NORTH AMERICA**

QoQ -0.7% YoY -1.2% YTD -1.4%

United States of America, Canada and surrounding islands and territories





Asia-Pacific

Central America

Europe

Middle East

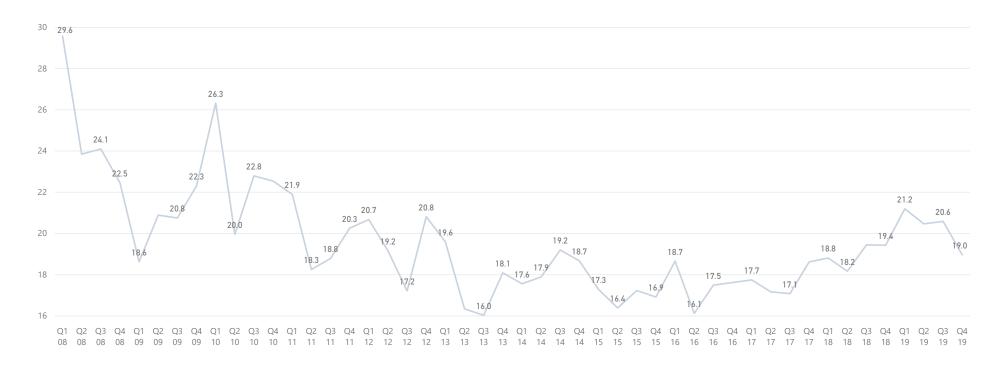
North America

South America

### **SOUTH AMERICA**

QoQ -7.9% YoY -2.4% YTD 8.0%

Venezuela, Columbia, Ecuador, Peru, Bolivia, Paraguay, Brazil, Argentina, Chile, Uruguay and surrounding islands





# FLIGHT HOUR ACTIVITY BY AIRCRAFT TYPE

**Helicopter** - This aircraft type leverages rotors to supply lift and can take off and land vertically. The aircraft's attributes allow it to hover, fly forward and laterally, and operate in areas and regions where fixed-wing aircraft cannot.

**Large Cabin** - This aircraft type is classified as any aircraft with a maximum take-off weight of 38,000 pounds or greater.

**Medium Cabin** - This aircraft type is classified as any aircraft with a maximum take-off weight between 20,000–38,000 pounds.

**Small Cabin** - This aircraft type is classified as any aircraft with a maximum take-off weight below 20,000 pounds.

Small

Helicopter







Medium













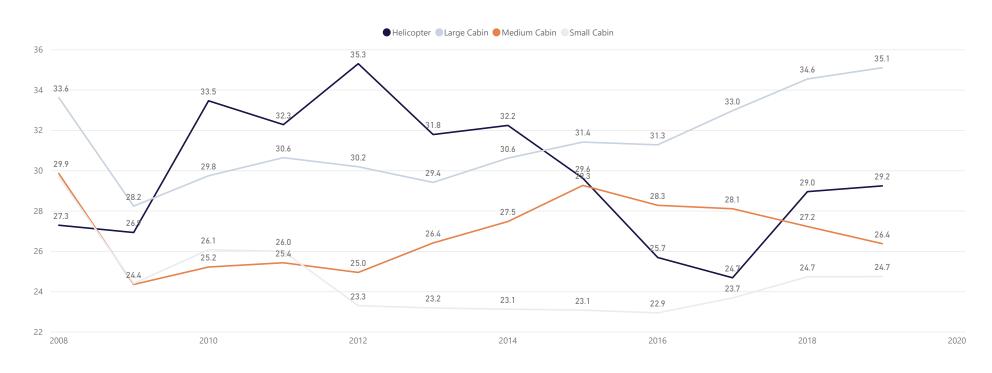






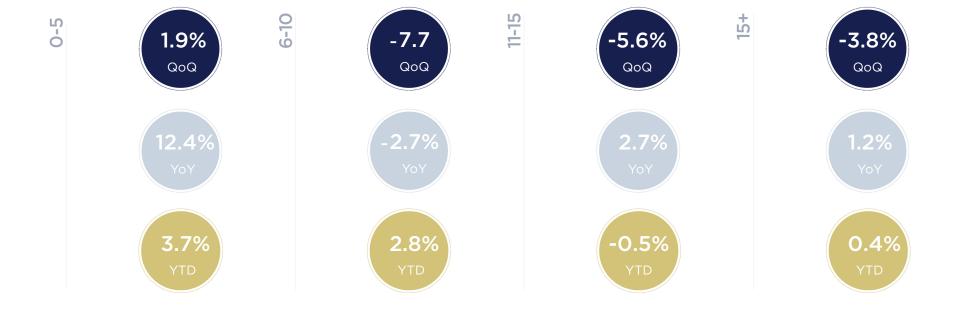
### AVERAGE FLIGHT HOURS BY AIRCRAFT TYPE

QoQ -3.2% YoY 1.8% YTD 0.5%





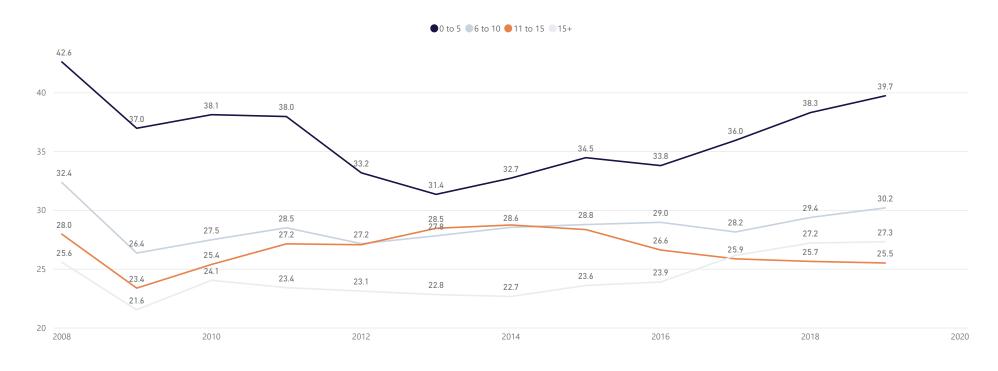
# FLIGHT HOUR ACTIVITY BY AIRCRAFT AGE





### AVERAGE FLIGHT HOURS BY AIRCRAFT AGE

QoQ -3.0% YoY 3.1% YTD 1.2%





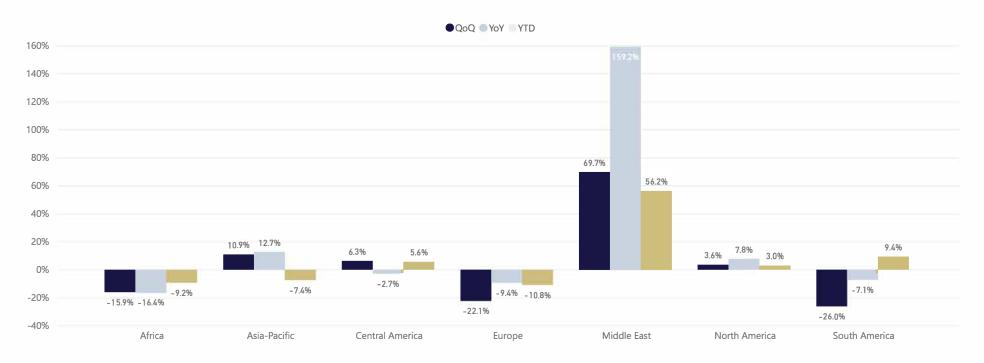
Part 91

**Part 135** 

# FLIGHT HOUR ACTIVITY BY REGION (PART 91)

FAR Part 91 operators follow regulations defined by the U.S. Federal Aviation Administration (FAA) for operation of aircraft. FAR Part 91 governs the operation of non-commercial aircraft.

QoQ 1.7% YoY 6.3% YTD 2.8%



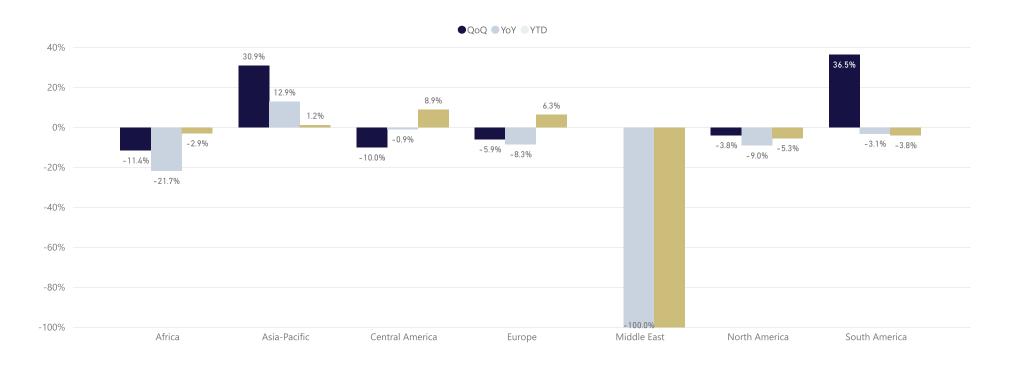


Part 135

### FLIGHT HOUR ACTIVITY BY REGION (PART 135)

QoQ -3.8% YoY -8.7% YTD -3.3%

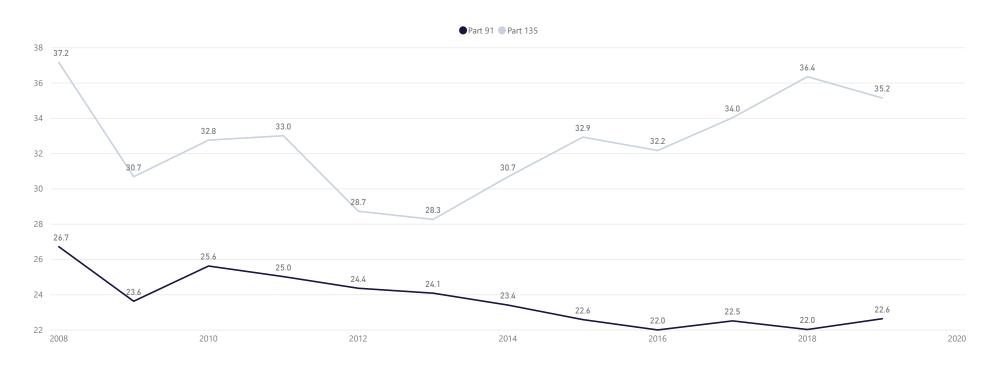
FAR Part 91 operators follow regulations defined by the U.S. Federal Aviation Administration (FAA) for operation of aircraft. FAR Part 91 governs the operation of non-commercial aircraft.





## AVERAGE FLIGHT HOURS BY FLIGHT PROFILE

QoQ -1.2% YoY -1.2% YTD -0.3%







From a single bolt to an engine, access a vast inventory of aircraft parts, engines and APUs and a global vendor network to source assets for anything that flies.



A JSSI Company

Make more informed decisions when dealing with the purchase, operation and disposition of aircraft with the trusted expertise of the industry leader in aircraft research, consulting and education.

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Discover a range of aircraft consulting services. From ASA-certified appraisals and technical advice to maintenance event management and aircraft inspections.



See the complete picture and take control of all maintenance, repair and overhaul (MRO) business processes in one innovative aviation software application.



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