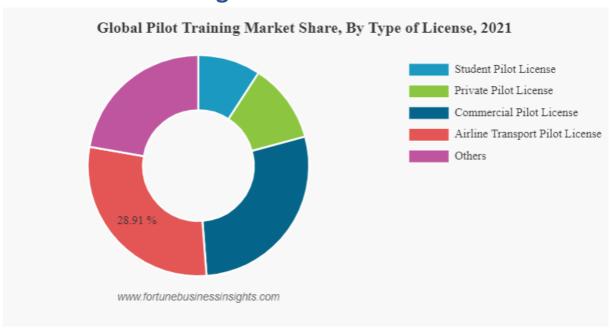
Global Pilot Training Market



Key Players Focus on Innovation and New Training Methodologies to Reinforce their Market Position

The market is dominated by key players such as Pan Am Flight Academy, Airbus Flight Academy, and CAE. These players majorly focus on developing partnerships with government and airline authorities for new projects.

LIST OF KEY MARKET PLAYERS

- ← <u>CAE Inc.</u>(Canada)
- ← <u>Lufthansa Aviation Training GmbH.</u> (Germany)
- ← L3 Harris Technologies Inc.(U.S.)
- ← Flight Safety International (U.S.)
- ← Pan AM Flight Academy (U.S.)
- ← <u>ATP Flight School.</u> (U.S.)
- ← Thrust Flight. (U.S.)
- ← Airbus Flight Academy. (France)
- ◆ Indra Sistemas S.A (Spain)
- ← BAA Training (Lithuania)

https://www.fortunebusinessinsights.com/pilot-training-market-107092

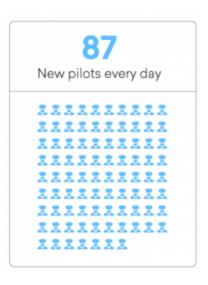
'80 New Pilots Required Every Day on Average' - Airbus



https://afm.aero/80-new-pilots-required-every-day-on-average-airbus/

According to the Federal Aviation Administration, the U.S. currently has 159,000 active airline transport pilots. But to meet growing demand, we'd need to train a staggering 87 new airline pilots every day for the next 20 years. Horizon Air's vice president for flight operations said he wants to hire more than 300 pilots this year alone.

To recruit new pilots, Minnesota-based Compass Airlines has begun offering \$17,500 signing bonuses to entice new recruits. Others are offering even more.



Extensive (and Expensive) Training Deterring Students

It used to be that pilots could get their start in the military, transition to a small regional airline, and then move up to a larger carrier.

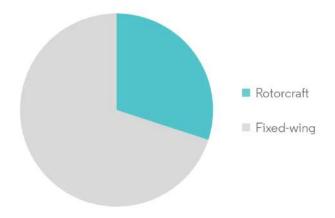
But when standards and flight-hour requirements were lowered, some regional airlines had accidents, most notably the Colgan Air crash in Buffalo, New York, in 2009 that killed 49 people. As a result, Congress and the FAA changed their rules. Co-pilots' flight-hour requirements increased from 250 hours to a whopping 1,500 hours. Pilots must also have 1,000 hours as a co-pilot.

When flight time can cost more than \$100 per hour, training expenses add up quickly. Especially when you're tacking them onto a college degree. Even JetBlue's innovative Gateway Connect program still costs \$125,000 and requires four years of training. Many students never make it to the cockpit.

https://stradaeducation.org/adult-learners/three-reasons-why-the-u-s-is-running-out-of-pilots-2/

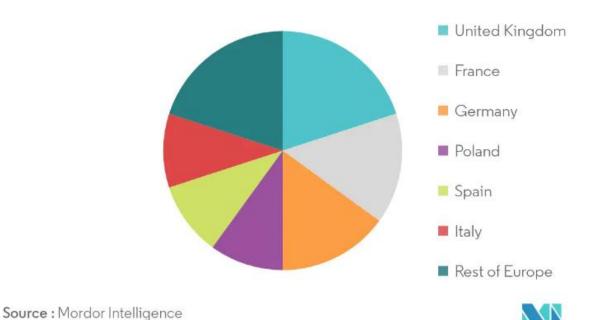
Europe Flight Training and Simulation Market:

Europe Flight Training and Simulation Market: Revenue (%), by Training Capability, 2019

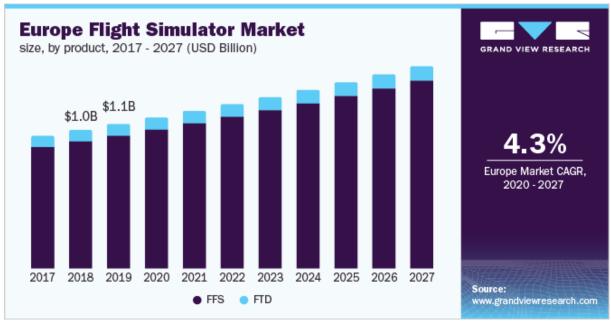


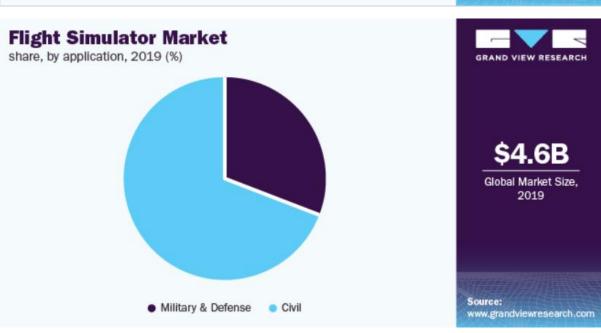
Market Concentration **Europe Flight Training & Simulation Market Top Players** Consolidated- Market dominated by 1-5 major players CAE Inc. FlightSafety International L3Harris Technologies Inc. Europe Civil Aviation Flight Training and Simulation Market TRU Simulation + Training Inc. (Textron Inc.) The Boeing Company Fragmented - Highly competitive market without dominant players *Disclaimer: Major Players sorted in no particular order NNSource: Mordor Intelligence

Europe Flight Training and Simulation Market: Revenue (%), by Geography, 2019



https://www.mordorintelligence.com/industry-reports/europe-flight-training-and-simulation-market

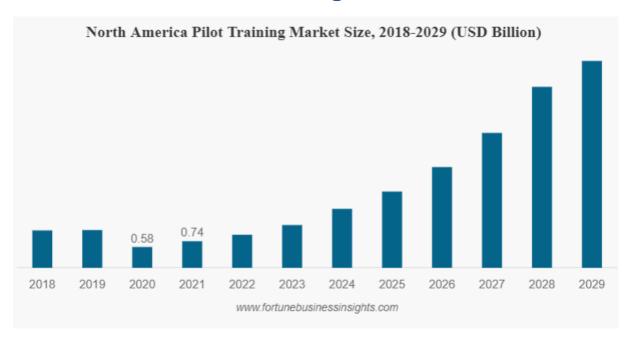






https://www.grandviewresearch.com/industry-analysis/the-global-flight-simulator-market

North American Pilot Training Market



Increasing Use of Virtual Reality Training to Emerge as a Prominent Market Trend

Advancement in technology created new training methods for pilots such as the use of virtual reality. Operators in training segments employ a range of devices, such as expensive computerized low-level Flight Training Devices (FTDs) and Full-flight Simulators (FFS), to train pilots for simple tasks such as flight deck flows and procedures. This technology has been increasingly used by large organizations such as the U.S. Air Force, NASA, and some major airlines, including KLM.

- ← Visionary Training Resources (VTR) is a virtual reality training specialist that has developed the FlightDeckToGo training system to supplement higher-cost training platforms to enhance the training process.
- ← Air France-KLM Airlines uses the Meta Quest 2 for training. The headset can be taken home and pilots can train for as long as they need. This offering includes them familiarizing the aircraft and a 360-degree walkaround.

VR can help to replace low-level flight training devices. It will help in increasing standardization and prepares pilots for flights.

Launch of Technologically Advanced New Aircraft will Propel the Need for Hiring Highly Skilled Pilots

Major aviation companies are intensely focused on developing and innovating advanced technology equipment to be incorporated into their aircraft. Companies' focus is on designing and manufacturing sustainable aircraft, promoting the green initiative by developing electric aircraft such as eVTOL.

The important challenge in commercial aviation for training pilots is transitioning from a traditional cockpit environment to a modern computerized glass cockpit. The modern technologies developed by aviation manufacturers focus on safety and improved aircraft performance.

- For instance, aircraft, such as Falcon, eVTOL, and other Airbus aircraft, require type rating certification holding pilots. The companies offer training to pilots with the help of <u>simulators</u> built especially for training purposes of specific aircraft, thereby enhancing training demand.
- In October 2022, FlightSafety International partnered with Dassault Aviation to train pilots for operating new Falcon 10X aircraft. FlightSafety will provide simulator testing for aircraft development, certification, and quality training for Falcon 10X pilots, maintenance technicians, and flight attendants worldwide.

The leading aircraft manufacturers are launching various new-generation aircraft equipped with advanced technologies. Pilots need to undergo specialized training to safely fly these aircraft, thereby, increasing the demand for effective pilot training.

Increasing Demand for Air Travel across the Globe to Surge Demand for Skilled Pilots

In recent years, the aviation industry generated a need for learning to fly faster with the utilization of heavier planes having more than 100,000 commercial flights operating worldwide every day, representing over 400 departures per hour.

Aviation provides a rapid worldwide transportation network that generates economic growth and jobs and facilitates international trade and tourism.

- ← According to ICAO, the demand for air transport will increase by an average of 4.3% annually over the next 20 years.
- Demand for air travel in April 2022 witnessed an upward trend of 78.7% compared to April 2021.

To cater to this growing demand, companies must incorporate a larger fleet of airplanes requiring trained pilots. This factor generates a demand for training pilots to provide well-trained, highly qualified, and maximum flight experienced pilots, thus driving the market growth.

← For instance, on March 24, 2022, Airbus stated that India would require 2,210 new aircraft over 20 years, comprising a fleet of 1,770 small and 440 medium & large aircraft. Over the period, India will become one of the fastest growing economies, empowering people's spending capacity for air travel. Due to this, passenger traffic in India is estimated to grow at 6.2% annually by 2040. India has witnessed an upward trend in the increase of air traffic. India will require 34,000 pilots and 45,000 technicians to cater to this demand by 2040. This factor enhances the demand for airline crew and pilots who are well-trained and tested to fly and operate the aircraft, thus propelling the demand for pilot programs.

High Initial Certification Cost for Pilot Training May Hamper Market Growth

Advancement in technologies and development of advanced technology-equipped aircraft fuel the need for high-technology simulators and other products required for effective training for pilots. However, the cost of these simulators and equipment is very high, resulting in high training costs.

• For instance, FAA qualified full flight simulators' (full motion) price ranges between USD 10,000,000 to USD 50,000,000. Due to this high cost, companies providing training to pilots offer courses at significant prices, creating a major restraint for the market as cadets and aspirants are bound to the constraint of high initial certification costs for pilot training.

For instance, L3Harris, a leading training provider, offers its professional training program for USD 83,995. However, companies also provide financing and scholarships due to which aspiring cadets can pursue pilot education and training.

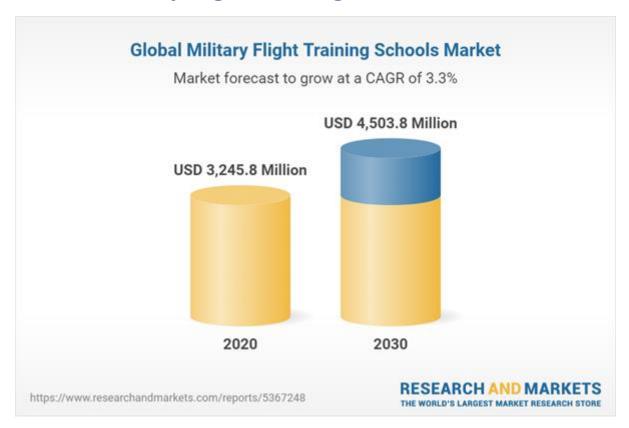
Flight Training to Lead Due to the Development of Advanced Simulators

By training mode, the market is segmented into flight training and ground training. Among these, the flight training segment dominated the global market and held the largest pilot training market share in 2021. The global demand for skilled pilots creates a demand for flight training. Rising demand for air travel from emerging economies such as India and China helps boost the market growth.

The ground training segment is projected to grow at a high CAGR during the forecast period. Rising technological advancement in training modes is expected to boost segmental growth. Virtual reality has been a newly popular training technique. Many training institutions and airlines, such as KLM airlines, have been using virtual reality for training pilots.

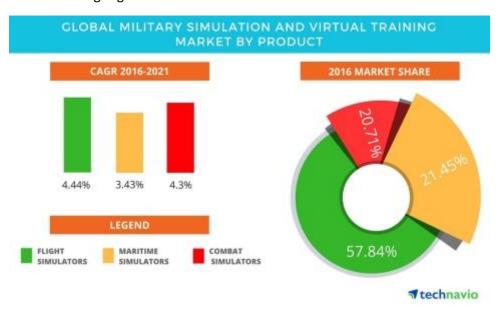
← In November 2021, KLM began training pilots using <u>virtual reality</u> applications built in-house for pilots flying new Embraer 175 and 190 aircraft for its KLM Cityhopper subsidiary.

Global Military Flight Training Schools Market



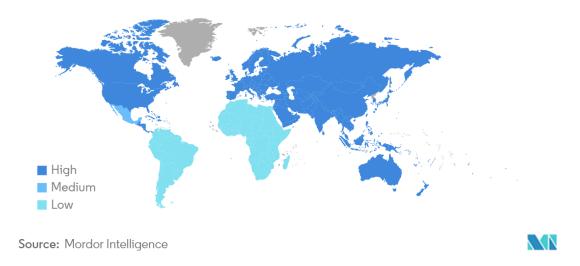
https://www.researchandmarkets.com/reports/5367248/military-flight-training-schools-market

The VR training segment



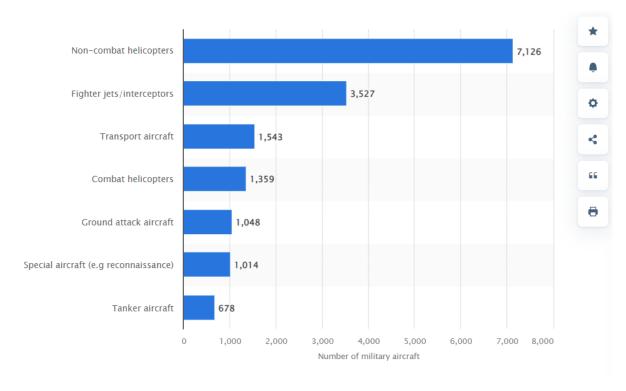
https://www.businesswire.com/news/home/20170503006333/en/Global-Military-Simulation-and-Virtual-Training-Market-2017-2021-Product-Segmentation-by-Technavio

Military Aircraft Simulation and Training Market - Growth Rate by Region, 2022-2027



 $\frac{https://www.mordorintelligence.com/industry-reports/military-aerospace-simulation-and-training-market}{market}$

NATO statisztika (potenciális piacméret, hogy mire kell kiképezni pilótákat)



https://www.statista.com/statistics/1293754/nato-aircraft-strength-type/