## SO...

# YOU WANT TO BE A PILOT

## CHOICE: MILITARY OR CIVILIAN



- Civilian
  - On your own for costs or scholarship
  - Attend University or Local Flight School
  - Build hours as flight instructor



- Military
  - 10 year active duty commitment
  - Choices: ROTC or Military Academy

## A PILOT SHORTAGE IS NOW

- Airlines face worldwide pilot shortage
- Flight Schools losing their Flight Instructors
- Military Pilot Shortage
  - USAF Academy is only training 400/year
  - USAF looking at NCOs to fill pilot slots
- Airlines parked some of their fleets due to lack of pilots
- Airlines offering signing and retention bonuses

#### PILOT LICENSES & RATINGS

- Student Pilot Training only
- Sport Pilot Limited personal flying
- Private Pilot Personal flying
- Commercial Fly for hire
- Flight Instructor (CFI/CFII) Train other pilots
- Airline Transportation Pilot (ATP) Airline requirement
- Instrument Rating Fly in the clouds
- Multi-Engine Rating More than one engine
- Turbine/Type Rating Higher performance aircraft
- Remote Pilot Fly drones / UAVs

#### STUDENT PILOT LICENSE – FIRST STEP

- Allows you to fly solo
- Minimum 16 years old (14 for gliders)
- ✓ Pass FAA Medical Exam (check for limitations!)
- May credit flight instruction before 16
- Flights approved by your flight instructor
- Fly only You <u>OR</u> You <u>and</u> the Flight Instructor
- Path to your Private Pilot License (at 17 years old)

#### PRIVATE PILOT LICENSE

DEPARTMENT OF TRANSPORTATION \*\* FEDERAL AVIATION ADMINISTRATION

IV NAME
MICHELLE SINGH

V ADDRESS

VI NATIONALITY USA
SEX HEIGHT WEIGHT HAIR EYES
IV A D.O.B. 10 FEB F 67 1.00 BLOND GREEN
IX HAS BEEN FOLKN TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF
IPPRIVATE RILOT 1

IN CERTIFICATE NUMBER
29 APR 2009

AN ACTING ADMINISTRATOR

- ✓ Be 17 years old (16 for gliders)
- ✓ Minimum 40 hours, generally closer to 50-60 hours
  - 20 hours dual (3 x-c, 3 night, 3 instrument)
  - 10 hours solo (5 x-c, 3 take-offs and landings at a control tower)
- ✓ Pass Written Exam (70%) good for 2 years
- ✓ Pass Practical Flight Test with Examiner
- > Allows you to fly passengers

## SPORT PILOT LICENSE



- ✓ Be 17 years old (16 for Balloon and Glider)
- ✓ U.S. Driver's License or FAA Medical
- ✓ Minimum 20 hours
  - ✓ I5 Instruction, 5 Solo, 2 x-c, 75 nm Solo Cross Country,
     2 Prep for Practical Test, Ground Training
- ✓ Pass Sport Pilot Knowledge Test
- ▼FAA Practical Flight Test
- Limitations on flying without extra instruction and sign off
- Fly aircraft in new FAA MOSAIC category

## MOSAIC (MODERNIZATION OF SPECIAL AIRWORTHINESS CERTIFICATION)

#### Expanded types of aircraft available to Sport Pilots

#### Aircraft:

- 4 seats
- Stall Speed: 59 KCAS no flap, 61 KCAS with flaps
- No engine, propeller, or weight restrictions
- 250 knot max speed
- Fixed or retractable gear

#### Pilots:

- Only Pilot + I Passenger
- Instructor Endorsement and FAA Medical certificate for Night Flying
- Instructor Endorsement to fly airspace with a Control Tower
- No Instrument Flight Rule flights, VFR only
- No commercial or business flying
- Below 10,000 feet MSL, or 2,000 feet AGL
- U.S. flying only

## MAJOR PILOT ORGANIZATIONS & EVENTS

- AOPA Aircraft Owner and Pilot Association
  - www.aopa.org
- EAA Experimental Aircraft Association
  - www.eaa.org
- EAA AirVenture Oshkosh, WI July
  - www.airventure.org
- Event Calendars Local airport fly-ins/car shows
  - www.socialflight.com

#### YOUNG EAGLES

#### www.youngeagles.org



- Free flights held at Young Eagles Rallies
- Open to 8-17 years old
- Flown over 2.5 million kids
- Logbook with code for <u>free</u> on-line Ground School
- Membership in American Model Association
- Voucher for free first flight lesson
- FAA written exam fee (\$140) reimbursed if passed
- EAA Flight Scholarships available
- Free student EAA membership until 18
- Free on-line copy of EAA Sport Aviation magazine

## AOPA HIGH SCHOOL FREE MEMBERSHIP

WWW.AOPA.ORG/AV8RS/



- Free Youth Membership (13-20 yrs. old)
- Full access to AOPA website
  - AOPA Flight Training Magazine



- Flight training & planning resources
- Weekly ePilot newsletter
- Webinars / Safety Education / Pilot Info Center
- Flight Scholarship Opportunities

## STEM FLIGHTS

#### WWW.STEMFLIGHTS.ORG



- Connects 6-12<sup>th</sup> grade students with volunteer Pilot Mentors
- STEM Flights are free
- Students choose one of 4 missions
  - Commercial & General Aviation
  - Climate and Weather & Environmental Science
  - Drones, Physics & Advanced Air Mobility
  - Aerospace Engineering
- Study STEM materials
- Discuss their work with the pilot
- Fly the mission
- Debrief the flight





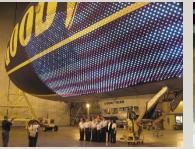


#### CIVIL AIR PATROL CADET PROGRAM

#### WWW.JOINCAP.COM



- Leadership and Aviation oriented organization for 12-18
- Opportunities abound:
  - Orientation flights in CAP aircraft
  - Aerospace Education STEM program
  - Aviation and leadership activities
  - Flight Academies and scholarships
  - Yearly encampments at military bases
  - Aviation and military career exploration
  - Numerous aviation and military special activities during the summer















#### CIVIL AIR PATROL - CADETINVE\$T

#### WWW.GOCIVILAIRPATROL.COM/PROGRAMS/CADETS/CADETINVEST



#### Cadet Wings

Assist cadets to obtain Private Pilot License – CAPP 60-43 Merit-based assistance



#### LIFT

Need-based financial assistance for week-long National Cadet Special Activities (NCSAs)

#### TOP – Take-Off Program

Need-based financial assistance for week-long National Flight Academies (NFAs)

#### Scholarships

Flight and NCSA scholarships

Several prerequisites:

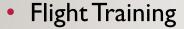
Mitchell Award, High School Senior or graduate, Accepted to College/School, more

#### U.S. Air Force Academy Prep School

Must have earned Mitchell Award and meet requirement of cadet scholarships

## AVIATION SCHOLARSHIPS THROUGH EAA

#### WWW.EAA.ORG/EAA/LEARN-TO-FLY/SCHOLARSHIPS



- Listing of several scholarships
- Preferences for strong passion for aviation with participation in aviation events and volunteer work as well as EAA members



- Post-Secondary Scholarships
  - Several scholarships for pilot training AND aeronautical engineering, aviation management, airframe and power plant (A&P) maintenance, and more...
- Ray Aviation Scholarships
  - Merit-based up to \$12,000
  - Administered through EAA Chapters

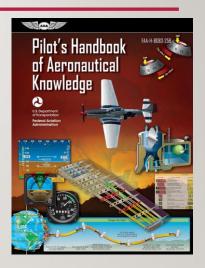


Additional questions: <u>Scholarships@EAA.org</u>.

Image: Hal Durbin Memorial Scholarship Winner

## STUDY & TRAINING MATERIALS

- FAA (<u>www.faa.gov</u>) Everything you need is on-line
  - Pilots Handbook of Aeronautical Knowledge (PHAK)
  - Airplane Flying Handbook (AFH)
  - Airmen Information Manual (AIM)
  - Federal Aviation Regulations (FARs)
  - Printed versions available
- FAA Safety (<u>www.faasafety.gov</u>)
  - Seminars and training (e.g., Pilot speakers, Aviation Safety Days)
- King Schools (<u>www.kingschools.com</u>)
- AOPA ASI (<u>www.aopa.org/training-and-safety/air-safety-institute</u>)
  - On-line Training Courses



#### STAY INFORMED

- AvWeb (<u>www.avweb.com</u>)
- General Aviation News (<u>www.generalaviationnews.com</u>)
- Aviation Week (<u>www.aviationweek.com</u>)
- AOPA Weekly Video and Newsletters (<u>www.aopa.org</u>)
- EAA Weekly Newsletters (<u>www.eaa.org</u>)
- Social Flight (<u>www.socialflight.com</u>)
- Many other sources

## AVIATION CAREERS – MORE THAN JUST PILOTS

- Pilots (Military, Corporate, Schedule Airlines)
- Aviation Maintenance Technician
- Avionics Technicians
- Airlines (Dispatcher, Freight, Meteorologist, Station Manager)
- Air Traffic Controller
- Aerospace Engineers & Technicians
- NTSB Accident Investigation
- Drone Pilots (Remote Pilot License)

## LOCAL AIRPORTS - MAKE CONTACT

- Cleveland Burke Lakefront (KBKL)
  - www.zoneaviation.com
- Cuyahoga Co. Airport Richmond Hts. (KCGF)
  - www.tandgflying.com
- Weltzien SkyPark Wadsworth (15G)
  - www.flyskypark.com
- Medina Co. Airport (IG5)
- Lorain Co. Airport (KLPR)
- Geauga Co. Airport EAA Chapter #5 (7G8)
  - chapters.eaa.org/eaa5

#### **AVIATION MUSEUMS – ENLIGHTEN**

- MAPS Akron-Canton Regional Airport
  - mapsairmuseum.org
- Liberty Aviation Museum Port Clinton
  - www.libertyaviationmuseum.org
- IWASM Cleveland Burke Lakefront
  - www.iwasm.org
- Wright-Patterson USAF Museum Dayton
  - · www.nationalmuseum.af.mil
- Champaign Aviation Museum Urbana, Ohio
  - · www.champaignaviationmuseum.org
- AirZoo Kalamazoo, MI
  - · www.airzoo.org
- Udvar-Hazy Washington, DC
  - <u>airandspace.si.edu/udvar-hazy-center</u>

#### TIME & MONEY

- Starting studying early
- Look over multiple flight training approaches
- Seek out Flight Scholarships and Grants
- When learning Fly Often <u>at least</u> once per week
- \*\*Set aside the funds so that your training is not interrupted
- Getting a Private Pilot License on your own
  - Cost: About \$10,000-20,000
  - Time: About 6 months

#### **AIRLINE MENTORING**

Many airlines have mentoring and assistance programs for new and aspiring

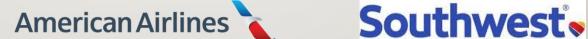
pilots













- https://unitedaviate.com/
- https://www.delta.com/us/en/careers/pilots/propel
- https://atpflightschool.com/airline-career-pilot-program/
- https://www.skywest.com/skywest-airline-jobs/career-guides/pilotpathway-program/
- https://careers.southwestair.com/d225

#### TIPS TO MAKE IT HAPPEN

- Visit airports
- Talk to Pilots and Flight Instructors
- Network with others
- Visit Universities with flight programs KSU, OSU
- Start studying
- Decide on your career path
- Take advantage of free resources
- Stay connected

#### **AVIATION SITES TO EXPLORE**

www.aopa.org

www.aopa.org/AV8RS/

www.eaa.org

www.eaa.org/eaa/youth/free-ye-flights

chapters.eaa.org/eaa5

www.airventure.org

www.joincap.com

www.faa.gov

www.faasafety.gov

www.kingschools.com

www.avweb.com

www.generalaviationnews.com

www.aviationweek.com

www.socialflight.com

mapsairmuseum.org

www.flyingmag.com/careers

www.aopa.org/training-and-safety/air-safety-institute

www.faa.gov/jobs/career\_fields/aviation\_careers/

www.faa.gov/education/grants\_and\_scholarships/aviation/

www.eaa.org/eaa/learn-to-fly/scholarships/

calaero.edu/dreamstakeflight/

www.aopa.org/training-and-safety/learn-to-fly/aviation-scholarships

www.gocivilairpatrol.com/programs/cadets/cadetinvest

www.libertyaviationmuseum.org

www.iwasm.org

www.pheasantrunairport.org

www.nationalmuseum.af.mil

www.airzoo.org

airandspace.si.edu/udvar-hazy-center

www.flyskypark.com

www.aviation.com

www.exploring.org/aviation/

erau.edu

www.kent.edu/cae

www.airnav.com

www.rovingbits.com/aero.html

flightaware.com

skyvector.com

