



Path to a Private Pilot Certificate

Private Pilots



Today's Flight Plan

- What is WMAA?
- Enrollment
- Flight Science Pathway
- Aviation Curriculum
- Private Pilot Ground School
- Flight Operations
- Lesson's Learned



Tuition-Free Public Charter High School Emphasis on Aviation & Engineering



STEM

Professionalism/Culture

- Young Ladies and Gentlemen



Higher Expectations

- 70% or higher to earn credit
- Character Grade
- 100 Hour Community Service Requirement

Extended School Day

- School Day is 8:00am – 3:30pm
- Seven class periods

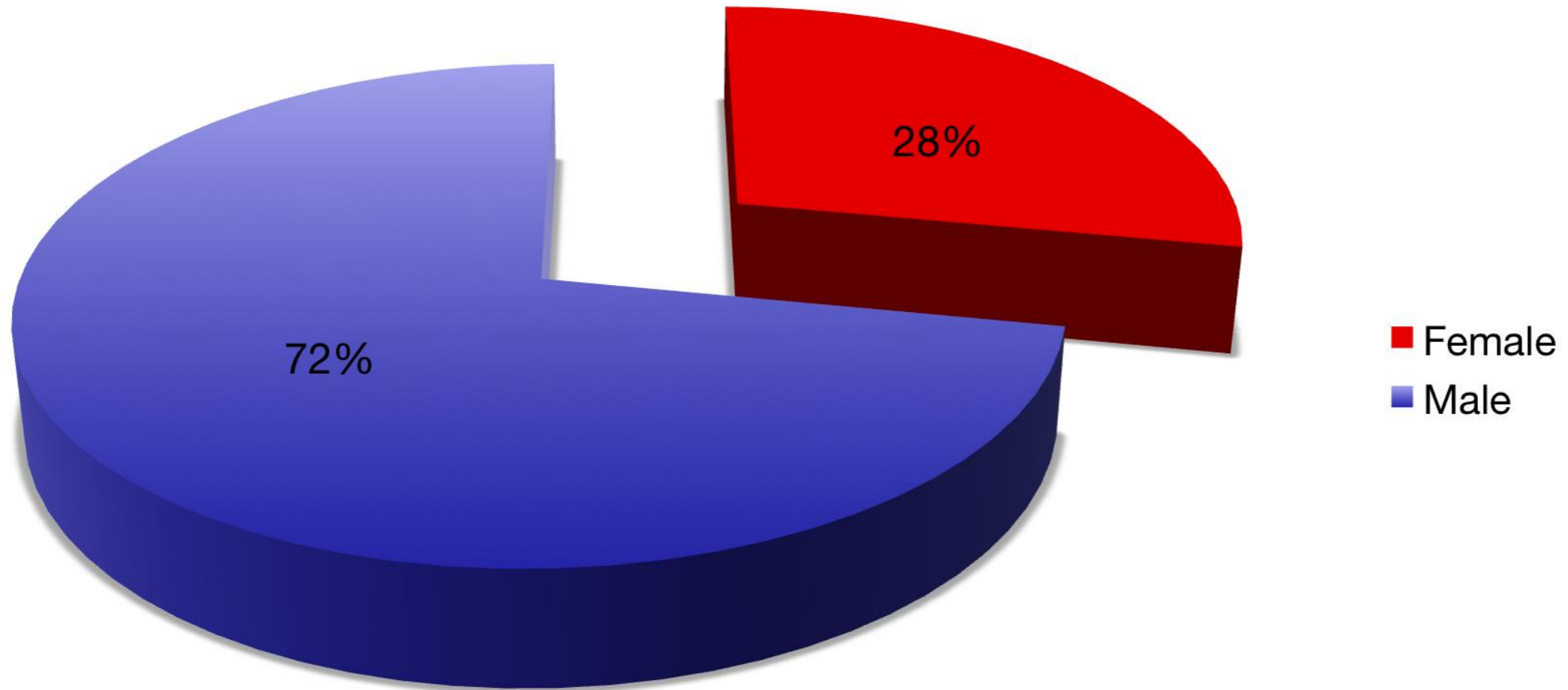
Special Guests at WMAA



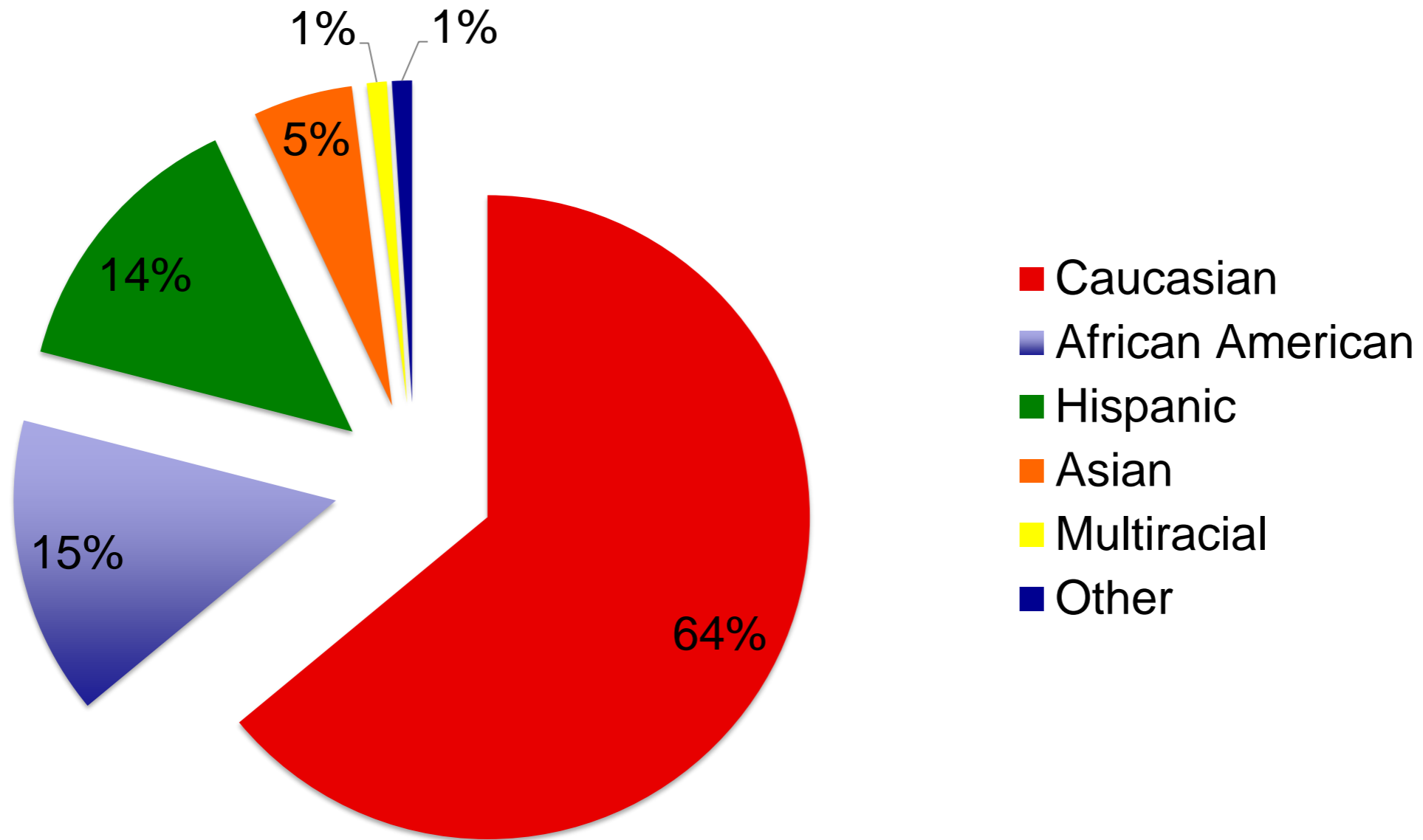
Our Partnerships

- Delta Air Lines Foundation
- Embry-Riddle Aeronautical University
- GE Aviation
- Gerald R. Ford International Airport
- Gulfstream
- Kalamazoo Air Zoo
- Bowling Green State University College of Aviation
- Northwestern Michigan College
- School of Missionary Aviation Technology
- Steelcase
- University of Michigan College of Engineering
- Western Michigan University College of Aviation

Gender Distribution



Race / Ethnicity



Flight Science Pathway

- Safety First
- Professionalism
- Pursuit of Excellence



Guidance

- **WMAA Board of Directors**
- **Aviation Subcommittee**
- **Career in Technical Education (CTE) Advisory Committee**



Aviation Curriculum

Grade 9

- Intro to Aviation
- Aviation History & Literature

Grade 10

- Aero Design & Simulation
- Aviation Physiology
- Flight Brief
- Intro to Aviation Maintenance
- Intro to Flight Planning
- Intro to Remote Control
- Intro to Aviation Weather
- Intro to Drafting

Grade 11

- Private Pilot GROUND School
- Aviation Avionics - KCTC
- Aviation Maintenance - KCTC
- Aviation Business Administration
- Aerospace Engineering

Grade 12

- Private Pilot FLIGHT School
- Intro to Unmanned Aerial Systems
- Aviation Avionics – KCTC
- Aviation Maintenance – KCTC
- Dual Enrollment KCC/WMU



Aviation-Related Activities

- WMU Junior Flight Team Competition
- Simulation Lab
- Summer Incentive Flight Program
- ACE Awards
- Kalamazoo Air Zoo Restoration Project
- Civil Air Patrol
- Summer Glider Solo Camp
- Remote Control Airplane Club
- Field Trips/Guest Speakers



Flight Science Required Courses

Grade 9

- Intro to Aviation
- Aviation History & Literature

Grade 10

- Preflight Planning
- Intro to Aviation Weather

Highly Recommend
Glider Camp
Participation

Grade 11

- Private Pilot Ground School

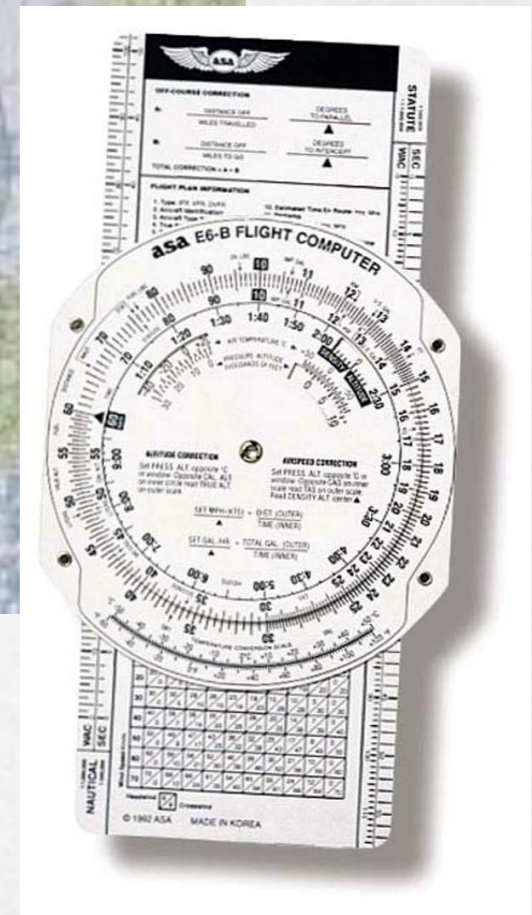
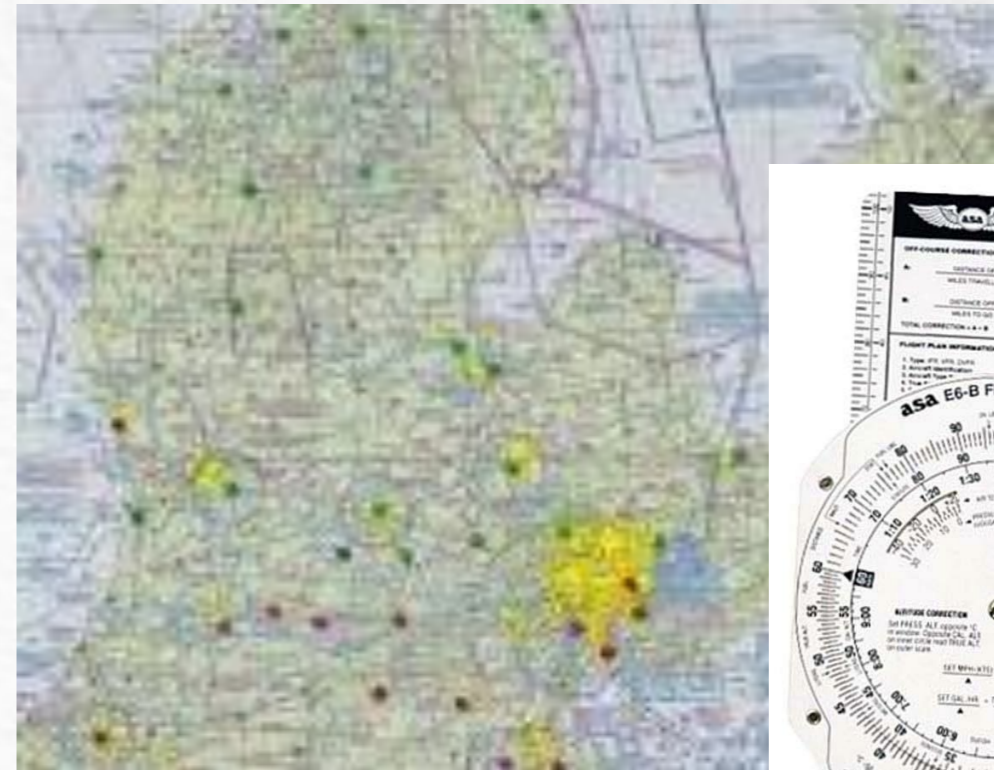
Grade 12

- Flight Science

Preflight Planning

10 Weeks

- Atmosphere
- Takeoff and Landing Data
- Weight and Balance
- Crosswind Calculations
- Density Altitude Calculations
- VFR Charts
- E6B Flight Computer
- Navigation Log
- JayBird Desktop Simulation – Landing Challenge



Goal: Identify future PPGS students



WEST MICHIGAN
AVIATION ACADEMY

Private Pilot Ground School

Full Year

- Jeppesen Textbook
- Red Bird Advanced Training Device
- Jay Bird Simulators
- Student Binder
- Articles
- Video



Goal: Earn endorsement then...

Pass FAA Written

Flight Science

Full Year (Two class periods 6-7)

- Jeppesen Flight Syllabus
- Student Grade Binder
- Red Bird Advanced Training Device
- Jay Bird Simulators
- Articles
- Video
- System Subject Matter Expert (SME)
- Private Pilot FAA Practical Test Study Guide (Jeppesen)
- Oral Exam Guide (ASA)



Goal: Private Pilot Certificate

FAA Check Ride

4-hour time block (Two hour oral and two hour practical)

Preparation

- FAA Written Results
- Endorsed Logbook
- Flight Grades Binder
- FAA Publications
- Maintenance Logbooks
- Emergencies and Limitations
- Oral Preparation
- FAA Designated Pilot Examiner



Certified Flight Instructors

Three on staff:

- Two retired F/A-18 Marines
- One corporate/charter/air ambulance

Must be state CTE certified

- Three graduate level classes
- Pass Professional Readiness Exam or ACT Benchmark

Two contract CFIs:

- One retired airline
- One retired ATC



Cessna 172SP

- **Avionics/Instrumentation**

- Analogue gages
- Garmin KLN-94/89 GPS
- NGT-9000+
- Garmin AOA Indicator



- **Hangar**

- Shared with two maintenance entities



- **Maintenance**

- Local & Remote
- Engine Overhaul

Gerald R. Ford International Airport (KGRR)



Daily Operations

- **Scheduling**
 - Google Calendar & SkyManager
- **Flight Operations**
 - Check out/Check in
 - Parking - In/out
 - Fueling
 - Remote airports
- **Classroom Operations**
 - Simulators
 - Academics



Lesson's Learned

Extra Curricular vs Integrated

- CTE Certification
- Qualified Instructors – Retention

Insurance – Liability

Funding – Gala / Individuals

Medicals - Timing

Citizenship - TSA

Standardization – SOPs / Instructor

Stan

Human Factor – Frequent HF Counsel

Payments – In the black

Safety / Professionalism – Daily



Future?

Aviator Flight Training Center



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Questions?



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