



FAA MISSION:

To provide the safest,
most efficient aerospace
system in the world

visualparadox.com

The FAASTeam and CFI Bootcamp Present

Behind The Curtain:

The AME's Role In Airmen Certification



William Thrift MD

- Senior Aviation Medical Examiner
- 928 277 9724
- wjthrift@gmail.com

Aerospace Medical Education Division

AME Programs

Airman Education Programs

Aeromedical Library Services

Aeromedical Publications

**International, Military, and Federal
Region**

**Aerospace Medicine Resident
Education**



Airman Education Programs

Aviation Physiology Courses

Global Survival Courses

Multimedia Aviation Physiology Course

Multimedia Global Survival Course

PROTE

ALL programs are free to those over 18 and interested in aviation



HUMAN FACTORS COURSE (in development)

Fatigue

Vision

Spatial Disorientation (Visual)

*Spatial Disorientation
(Vestibular)*

Pilot Fitness

Pilot Self-Imposed Stress



AME



FAA

AVIATOR



AME IS THE LINK
BETWEEN
THE FAA AND AIRMAN

http://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/ame/

File Edit View Favorites Tools Help

Convert Select

Favorites New Message AF Portal - Home AAM-400 Business Plan F... Aerospace Medical Educa... Aviation Safety - Informat... AVS Dash

Aviation Medical Examiner (AME) Designee Infor...

Congress
Consultants & Contractors
Educators & Students
Military

Online Systems and Resources

- Aerospace Medical Certification Subsystem (AMCS)
- Contact your Regional Flight Surgeon
- Guide for Aviation Medical Examiners
- Order Medical Forms and Stationery

Publications and Manuals

- Aerospace Medical Certification Statistical Handbook (PDF, 965 KB)
- Aviation Medical Examiner System - Order 8520.2G (PDF)
- Federal Air Surgeon's Medical Bulletin
- Pilot Safety Brochures

Training


- Advanced Aerospace Medicine On-line
- Aviation Medical Examiner Seminar Schedule
- Aviation Medical Examiner Training

Videos

- Cardiology Changes in Certification (21:10 minutes)
- Conditions AMEs Can Issue (CACI) (22:47 minutes)
- ECG Webinar - Aeromedical Certification and Implications (58:56 minutes)
- ECG II: Aeromedical Management of ECG abnormalities detected as part of an FAA exam (48:38 minutes)


Other General and Support Information

<http://WWW.FAA.GOV/GO/AME>

 **Federal Aviation Administration**

AME RESOURCE WEBSITE

WWW.FAA.GOV/GO/AME



Student Pilots

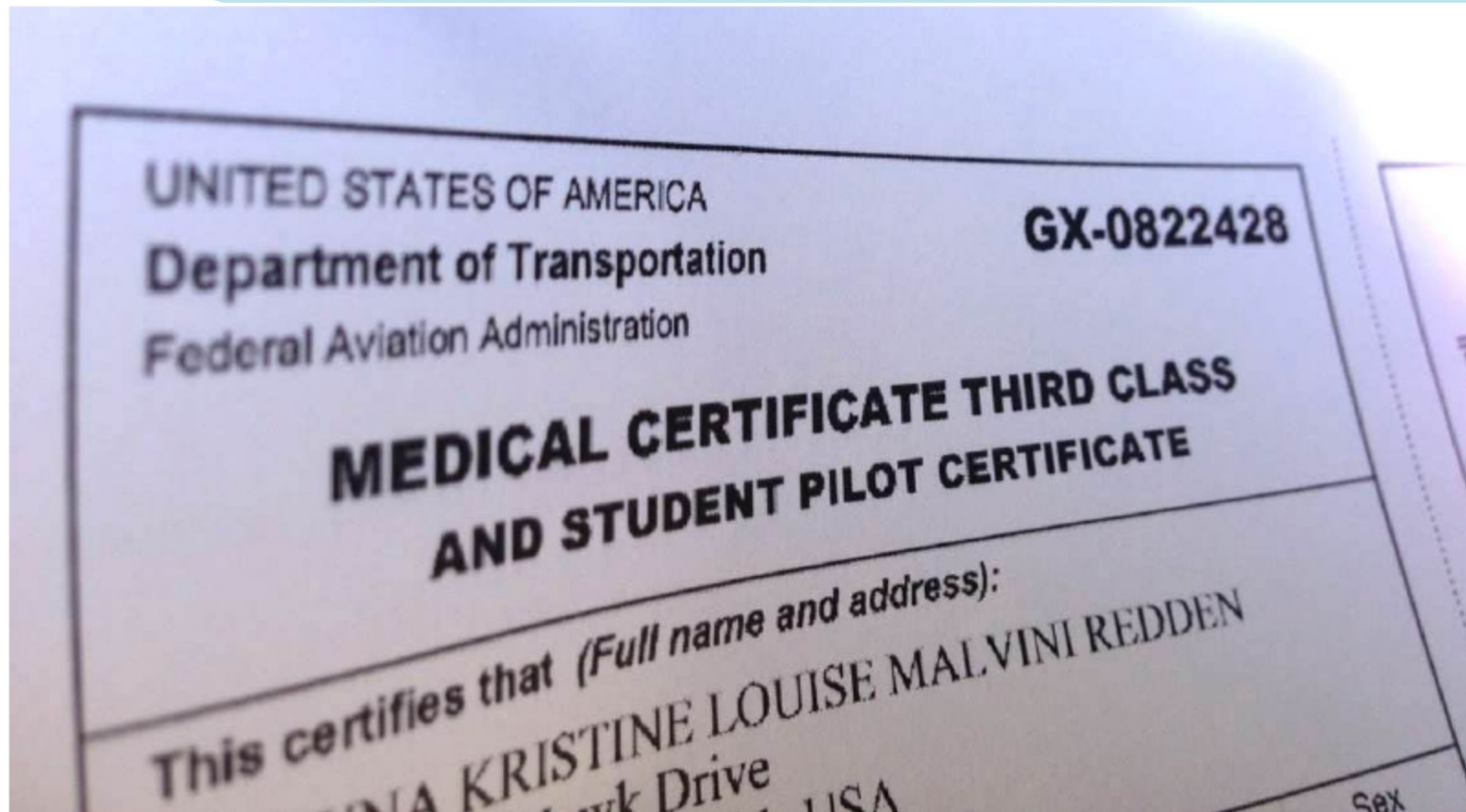


8420-2

The image shows two FAA medical certificate forms. The top form is FAA Form 8420-2, titled 'MEDICAL CERTIFICATE 1ST CLASS AND STUDENT PILOT CERTIFICATE'. It has a yellow header with the FAA logo and the text 'UNITED STATES OF AMERICA Department of Transportation Federal Aviation Administration'. The form includes fields for 'Date of Birth', 'has met the medical standards', 'Date of Examination', 'Signature', 'Typed Name', and 'AIRMAN'S SIGNATURE'. The bottom form is FAA Form 8500-9, titled 'MEDICAL CERTIFICATE 3RD CLASS'. It has a white header with the FAA logo and the text 'UNITED STATES OF AMERICA Department of Transportation Federal Aviation Administration'. It includes fields for 'Date of Birth', 'Height', 'Weight', 'Hair', 'Eyes', 'Sex', 'has met the medical standards', 'Date of Examination', 'Examiner's Serial No.', 'Signature', 'Typed Name', and 'AIRMAN'S SIGNATURE'. Both forms are labeled 'FAA Form 8420-2 (3)' and 'FAA Form 8500-9 (1-01) Supersedes Previous Editions'.

8500-9

When they were part of the paper 8500-8 form they were pull off items. Later they came from AMCS depending upon the requested certificate in MedXpress and were both printed on plain paper. Now the 8500-9 is computer generated in AMCS and printed on plain paper.



This was both a pilot certificate and a medical certificate from AMCS certificate print.

Student Pilot



What my friends think I do.



What my mom thinks I do.



What society thinks I do.



What my instructor thinks I do.



What I think I do.



What I actually do.

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		CERTIFICATE NO. BB-654987	
STUDENT PILOT CERTIFICATE			
THIS CERTIFIES THAT (Full name and address) HANNA MARIE JASON 7206 YORK ROAD TOWSON, MD 21212			
BIRTH DATE	HEIGHT	WEIGHT	HAIR EYES SEX
7/2/73	63 IN	130 LBS	BROWN HAZEL
Has met the standards prescribed in Part 61 of the Federal Aviation Regulations for a Student Pilot Certificate.			
ISSUED BY LIMITATIONS	ISSUANCE DATE		EXPIRATION DATE
	1/7/2006		1/31/2008
	SIGNATURE OF EXAMINER OR INSPECTOR David P. Cooper DAVID P. COOPER		EXAM. DESIG. NO. OR INSPECTOR'S REG. NO. EA 04-8853
	DATE EXAMINER'S DESIG. EXPIRES: 5/31/07		
STUDENT PILOT'S SIGNATURE Hanna M. Jason			
FAA Form 8710-2 (2-77) FORMERLY FAA FORM 8420-1			

Old paper style

New plastic style

UNITED STATES OF AMERICA		XI	
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			
IV NAME JOHN Q PUBLIC XX			
V ADDRESS XX XX XX XXXXXXXXXXXXXXXXXXXX			
VI NATIONALITY USA	SEX	HEIGHT	WEIGHT HAIR EYES
IVa D.O.B. 18 AUG 1977	M	75	230 BROWN BROWN
IX HAS BEEN FOUND TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF			
II FLIGHT ENGINEER			
III CERTIFICATE NUMBER XXXXXXXXXXXXX			
X DATE OF ISSUE 16 MAY 2002			
CARD 1 of 2	XIV	ADMINISTRATOR	

Student Pilot and Medical Certificate

- **On 1 April 2016, AMEs will no longer issue the combined student pilot certificate and medical certificate**
- **The old process: paper certificate, under age 40, student pilot certificate good for 5 years, over age 40, student pilot certificate validity is 2 years.**
- **The new process: the plastic certificate has no expiration**
- **Student pilot certificate is a pilot certificate**

Student Pilot

- **Student pilots apply through flight instructor (IACRA-registered) or use paper Form 8710-1**
- **FAA inspectors at Flight Standards District Office (FSDO) or Designated pilot examiners (DPE), or airmen certificate representatives at a part 141 flight school**
- **Student pilot certificate is a pilot certificate only, they will need a valid medical to solo**

Student Pilot

- **Advisory Circular AC 61-65F**
- **Three weeks to receive**
- **Verifying identity, recordkeeping, English language proficiency must be assessed at time of application and during each training and testing event**
- **Student pilot certificate is a pilot certificate, (age 16 minimum) but must still have an accompanying medical certificate before solo, no age requirement for medical**



Federal Aviation
Administration

<https://iacra.faa.gov/IACRA/default.aspx>

- Home
- What's new in IACRA
- Frequently Asked Questions
- Aircraft Search
- Site Feedback
- Contact Us
- Training and Documentation
- Helpful FAA Links
- Available Certifications and Ratings



IACRA



Integrated Airman Certification and Rating Application (IACRA)

IACRA is the web-based certification/rating application that guides the user through the FAA's airman application process. IACRA helps ensure applicants meet regulatory and policy requirements through the use of extensive data validation. It also uses electronic signatures to protect the information's integrity, eliminates paper forms, and prints temporary certificates.

What's new in IACRA



U.S. Department
of Transportation
Federal Aviation
Administration

FAA Form 8710-1, Airman Certificate
and/or Rating Application
Supplemental Information and
Instructions

http://aopa-pic.podomatic.com/entry/2016-01-15T10_39_51-08_00

Username:

Password:

[Forgot Username or Password?](#)

or [Register](#)

[Help](#)


Need Help?

Download the latest version of the

Federal Aviation
Administration

Federal Aviation Administration
SAFETY TEAM

International Student Pilots



Transportation
Security
Administration

Alien Flight Student Program | Provider Portal ▾ Candidate Portal ▾
Department of Homeland Security

User ID:
Password:
Login Help
[Create New Provider Account](#)
[Create New Candidate Account](#)

What's New Regulatory Legal Notices FAQs Application Guide Links Contact AFSP

Frequently-Asked Questions

[General Frequently Asked Questions](#)
[Login Frequently Asked Questions](#)
[Candidate Frequently Asked Questions](#)
[Provider Frequently Asked Questions](#)
[Payment Frequently Asked Questions](#)
[Fingerprint Process Frequently Asked Questions](#)
[Category 4 Frequently Asked Questions](#)
[DOD Frequently Asked Questions](#)

General Frequently Asked Questions

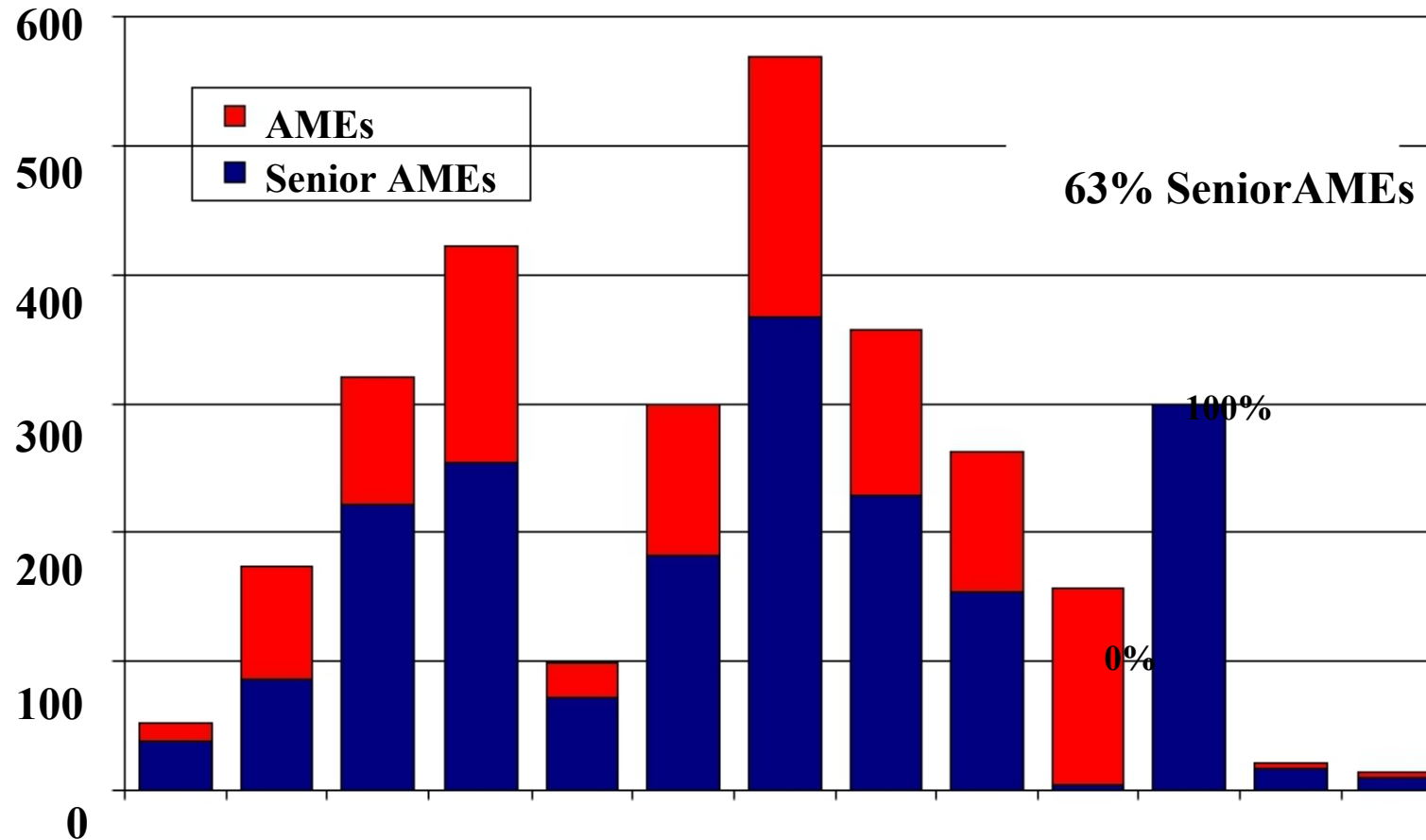
(top)

1. [What is the Alien Flight Student Program \(AFSP\)?](#)
2. [Who must participate in the Alien Flight Student Program?](#)
3. [What is the Alien Flight Student Program \(AFSP\) Process?](#)
4. [How does the Alien Flight Student Program \(AFSP\) communicate with Candidates and Flight Training Providers?](#)
5. [How do Federal Aviation Administration \(FAA\) regulations relate to the Alien Flight Student Program \(AFSP\)?](#)
6. [What is the best way to find assistance with the AFSP process?](#)

<https://www.flightschoolcandidates.gov>

Distribution of AMEs by Region

AMEs/Senior AMEs



Distribution of AMEs by Medical Specialty

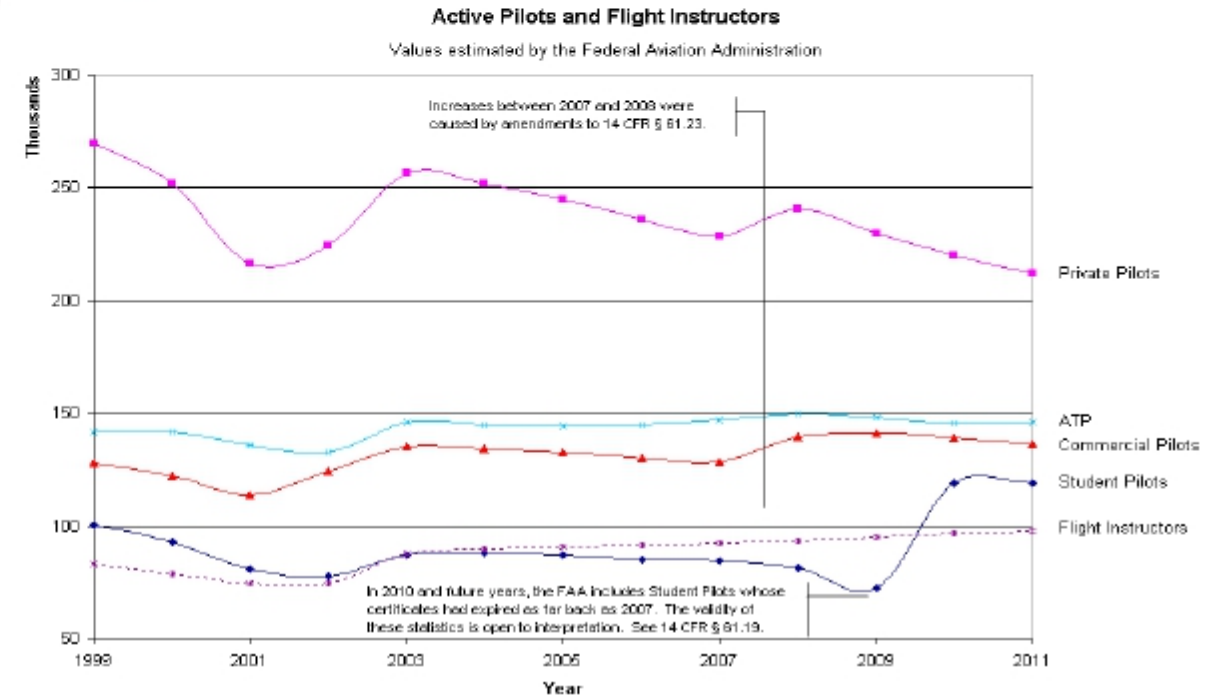
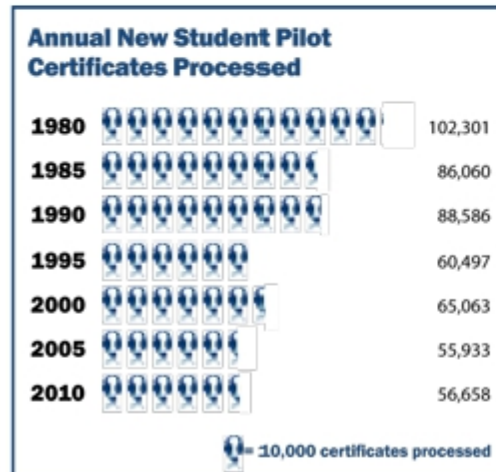
- **Family Practice / General Practice** **50.6%**
- **Internal Medicine** **18.5%**
- **Aerospace Medicine** **9.6%**
- **Occupational / Industrial Med** **6.8%**
- **General Surgery** **2.6%**
- **Ophthalmology** **2.2%**
- **Emergency Medicine** **1.7%**
- **Otorhinolaryngology, Orthopedic Surgery, OB/GYN**
- **Surgeon, Cardiology,** **1%**
- **All others** **<1% (ea)**

Endorsements



<p>Private aeronautical knowledge: § 61.87(b)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has satisfactorily completed the private knowledge test required by § 61.87(b) for the _____ (aircraft make and model).</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>	<p>Private flight training: § 61.87(c)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has received the required private flight training in a _____ (aircraft make and model). I have determined that he/she has demonstrated proficiency in the maneuvers and procedures required by § 61.87(c), (d) through (k), as appropriate, and is proficient to make solo flights in a _____ (aircraft make and model).</p> <p>Limitations: _____</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>	<p>Solo flight (additional 90-day period): § 61.87(e)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has received the required training to qualify for solo flight. I have determined that he/she meets the applicable requirements of § 61.87(e) and is proficient to make solo flights in a _____ (aircraft make and model).</p> <p>Limitations: _____</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>
<p>Solo flight (additional 90-day period): § 61.87(f)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has received the required training to qualify for solo flight. I have determined that he/she meets the applicable requirements of § 61.87(f) and is proficient to make solo flights in a _____ (aircraft make and model).</p> <p>Limitations: _____</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>	<p>Solo flight (additional 90-day period): § 61.87(g)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has received the required training to qualify for solo flight. I have determined that he/she meets the applicable requirements of § 61.87(g) and is proficient to make solo flights in a _____ (aircraft make and model).</p> <p>Limitations: _____</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>	<p>Solo flight (additional 90-day period): § 61.87(h)</p> <p>I certify that Mr./Ms. (First Name, MI, Last Name) has received the required training to qualify for solo flight. I have determined that he/she meets the applicable requirements of § 61.87(h) and is proficient to make solo flights in a _____ (aircraft make and model).</p> <p>Limitations: _____</p> <p>Signed _____ Date _____ CFI # _____ Exp Date _____</p>

Endorsements go into the log book



© 2012 by Robert Chapin

MedXpress: It's Easy

Oct 1, 2012



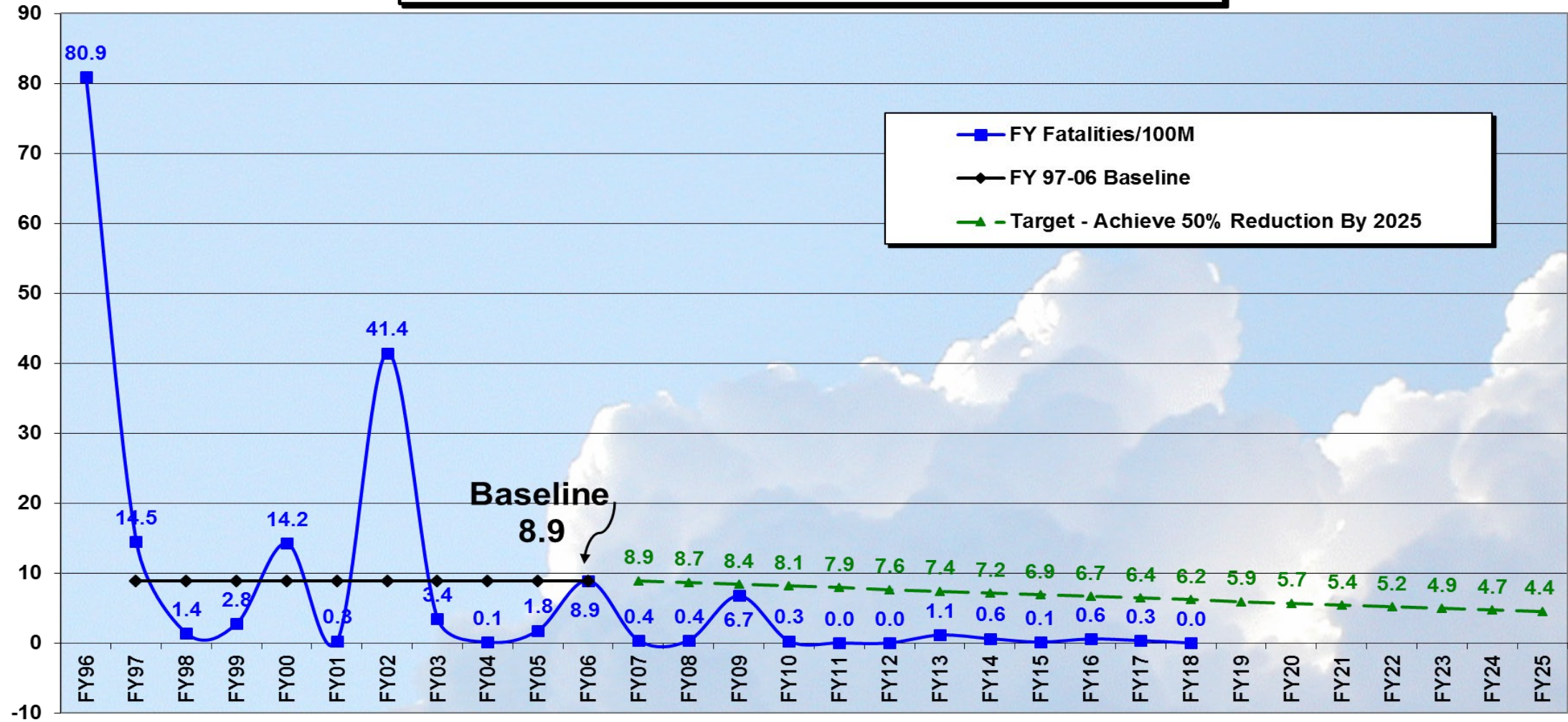


Air Carrier Fatality Rates/Targets Fatalities per 100 Million Persons on Board

FY18 Year-to-Date Fatalities - 0

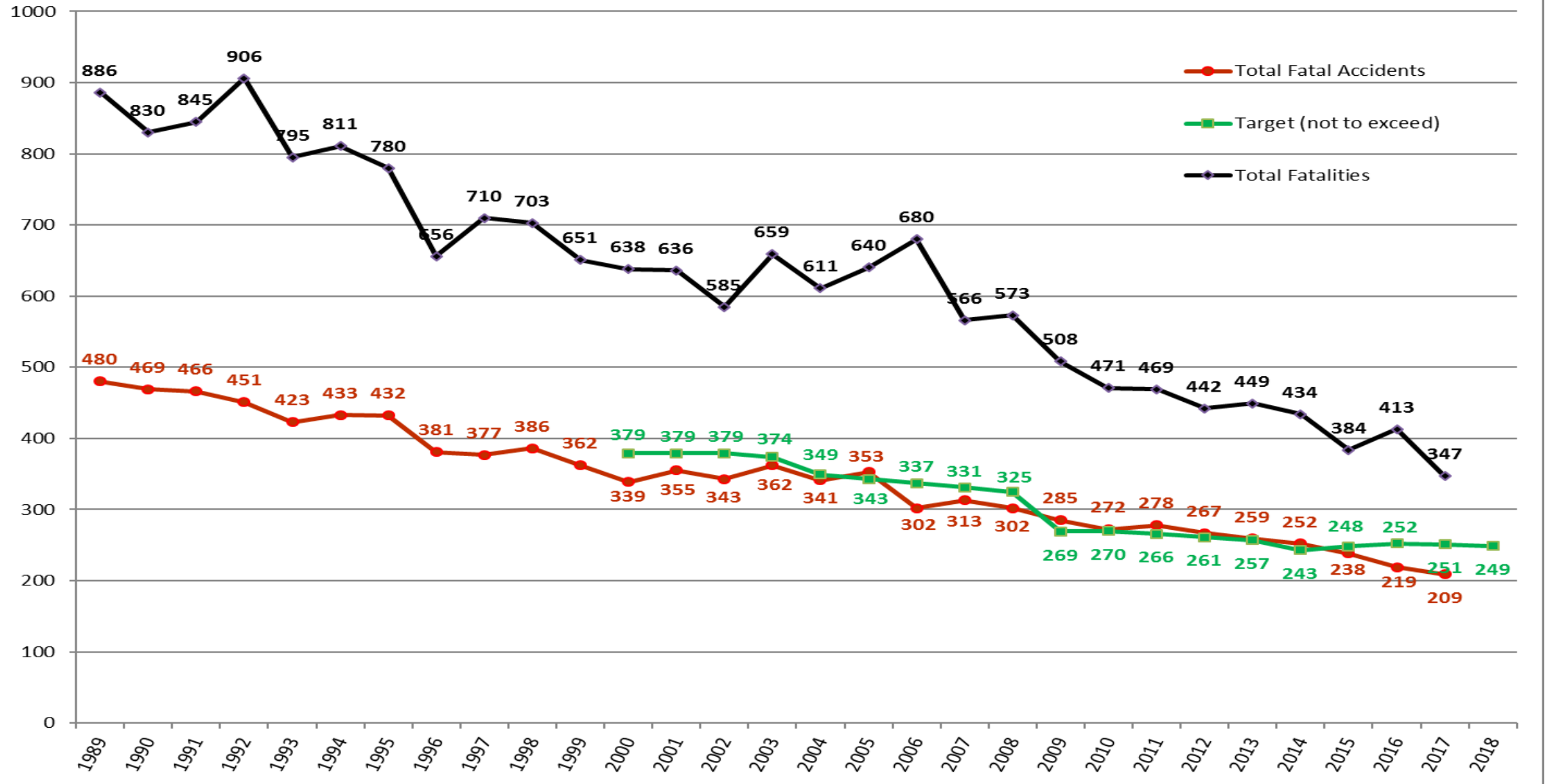
Fatality Threshold - 55

FY18 Rate Assumes No Additional Fatalities

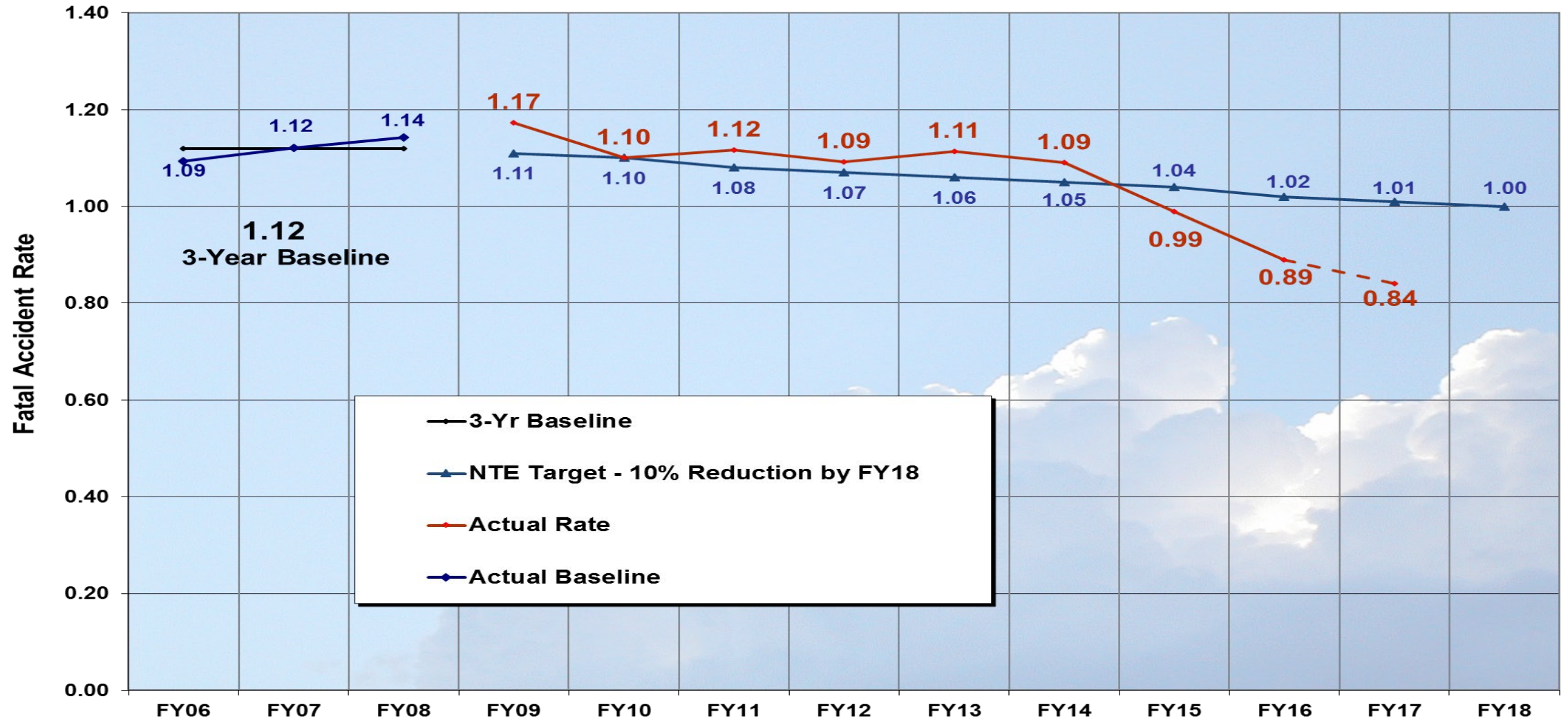


Comparison of General Aviation Fatal Accidents/Targets

General Aviation Includes General Aviation and Unscheduled Part 135



AVS Safety Performance GA Fatal Accident Rate (Fatal Accidents/100,000 Hours)



Disqualifying Conditions

Disqualifying Conditions	Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, and (15) Transient loss of control of nervous system function(s) without satisfactory explanation of cause.
--------------------------	--

Special Issuances

Special Issuances

The following pages of the Guide for Aviation Medical Examiners introduce the AME Assisted Special Issuance (AASI) process.

The Guide refers to a number of selected medical conditions that are initially disqualifying (if the applicant does not meet the issue criteria in the Aerospace Medicine Dispositions Tables or the Certification Worksheets) and must be deferred to the AMCD or RFS. If this is a first-time application for an AASI for the applicable disease/condition, and the airman has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or [RFS](#) for the initial determination.

CACI – Conditions AMEs Can Issue

- Be aware of what can be issued

- Currently 20 CACIs

New are Breast cancer, Colon cancer,

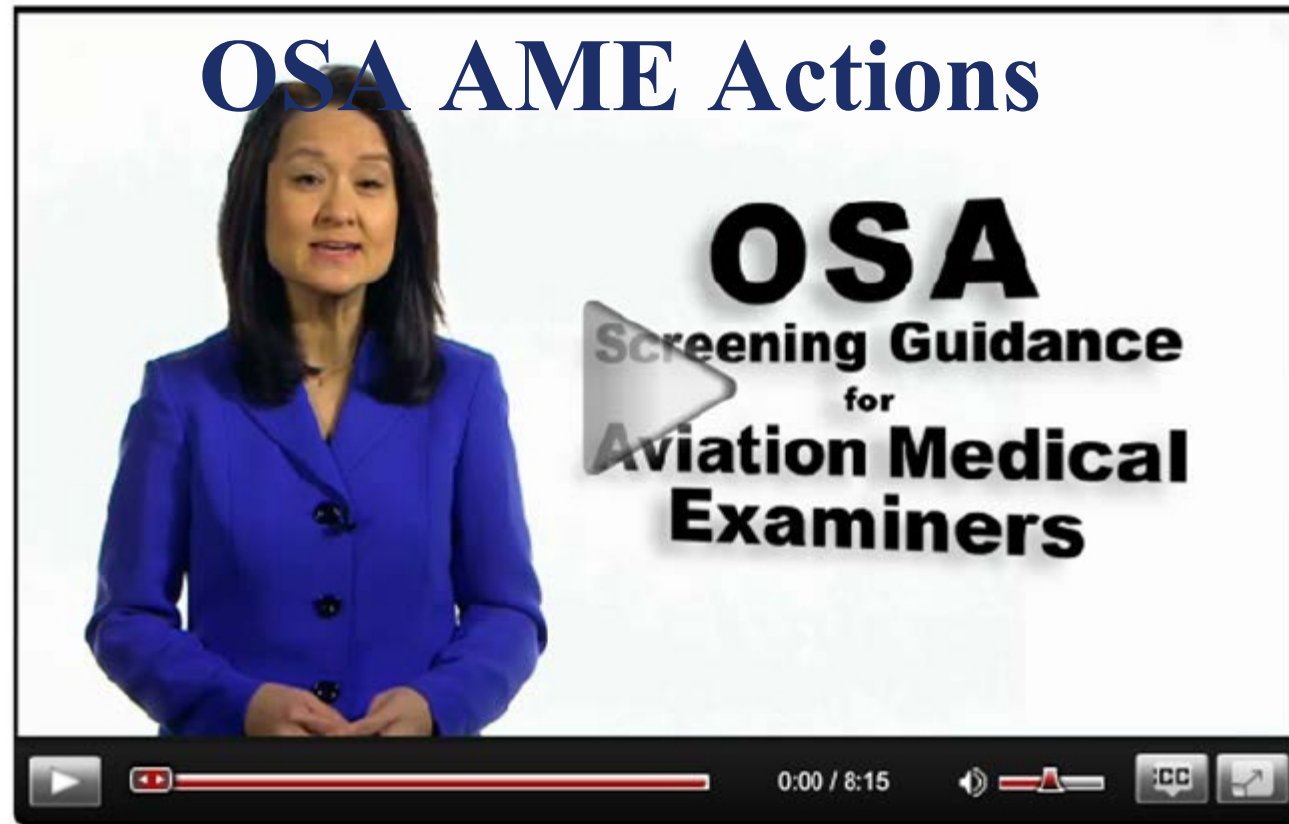
C-ITP (Thrombocytopenia) and Hemochromatosis.

CACIs with Certification Worksheets

A - H	H - T
Arthritis	Hypertension
Asthma	Hypothyroidism
Bladder Cancer	Migraine and Chronic Headache
Breast Cancer (PDF)	Mitral Valve Repair (PDF)
Chronic Kidney Disease	Pre-Diabetes
Colitis	Prostate Cancer
Colon Cancer	Renal Cancer
Glaucoma	Retained Kidney Stone(s) (PDF)
Hepatitis C - Chronic	Testicular Cancer

- Item 60 on the 8500-8 is where you write:
CACI qualified _____

FAA TV: OSA Screening Guidance for AMEs



(CY 2020)

356,677 Total applications received

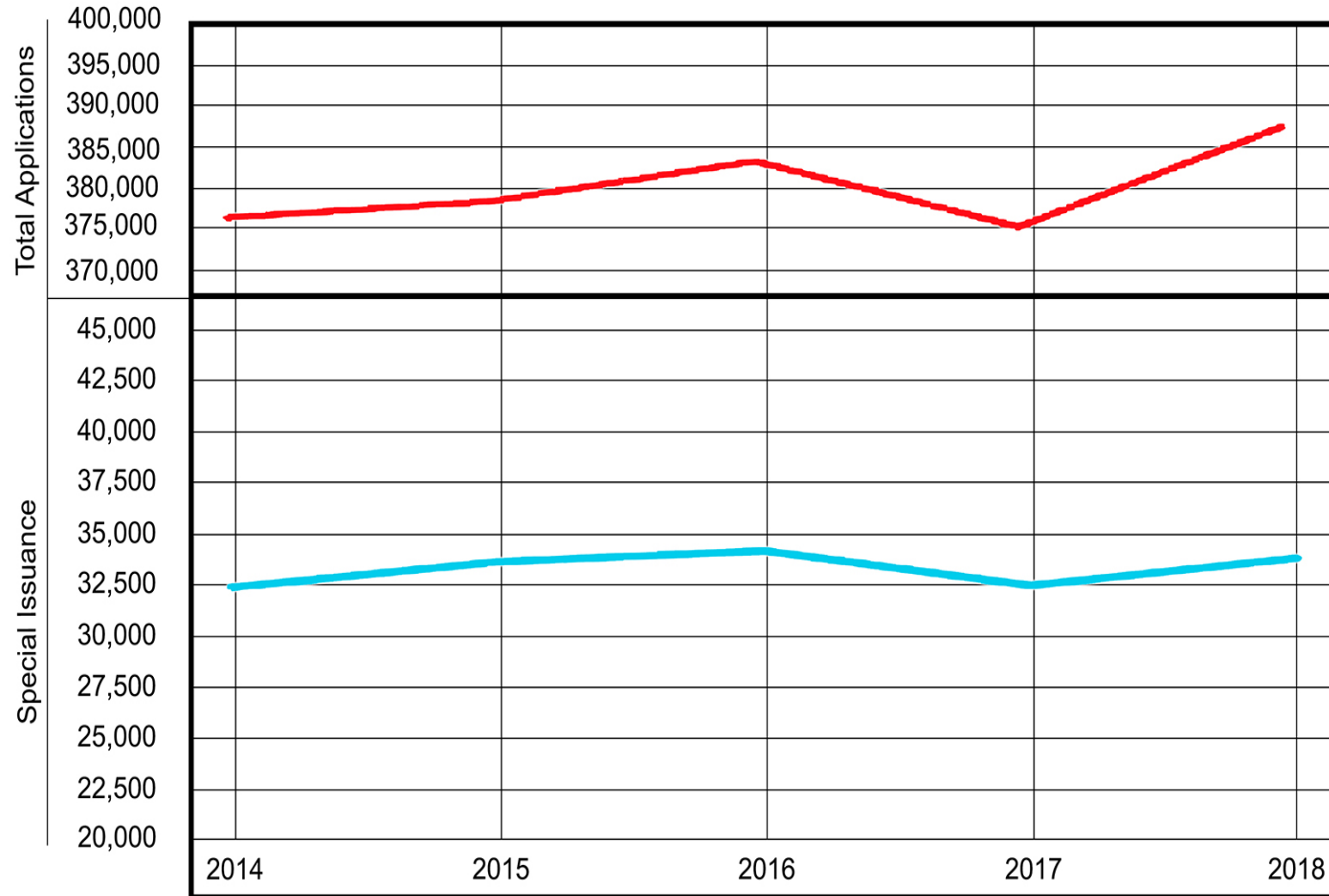
Class 1	Class 2	Class 3	TOTAL
225,229	57,491	73,957	356,677

(CY 2020)

Special Issuance Certificates Granted

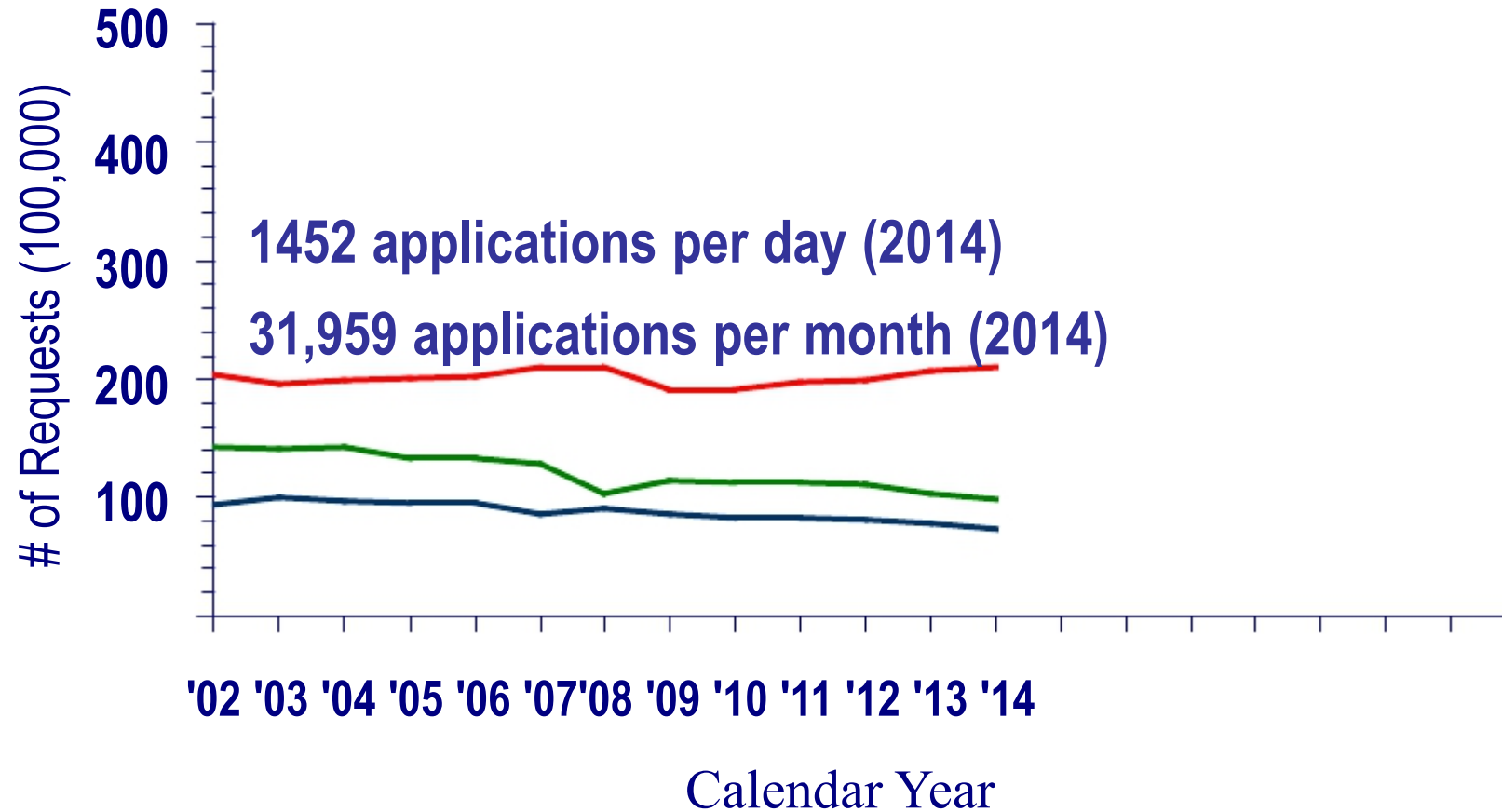
Class 1	Class 2	Class 3	TOTAL
21,738	5,961	7,029	34,728

Total Applications vs SI by Year



Aeromedical Certification Requests

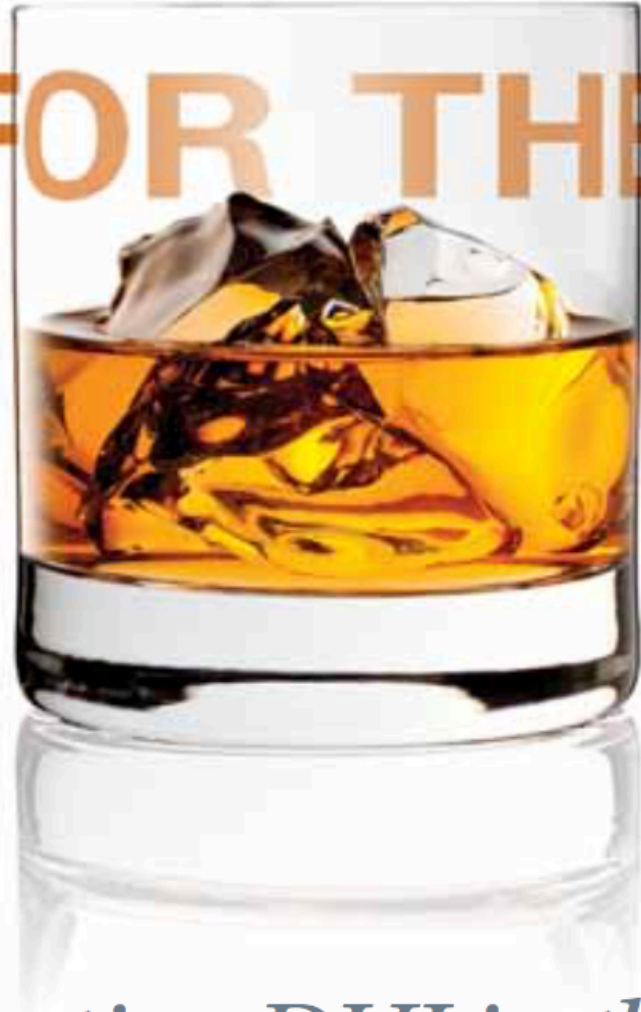
— Class I
— Class II
— Class III
TOTAL





Daniel A. Varela / Miami Herald

NONE FOR THE ROAD:



Preventing DUI in the Sky

Summary

- **AME Role in Safety**
- **AME Demographics**
- **Ways to Improve the Process**
- **Designee Management Past/Present/Future**



BasicMed
(after 36 months)

**Statistics
and
Questions**



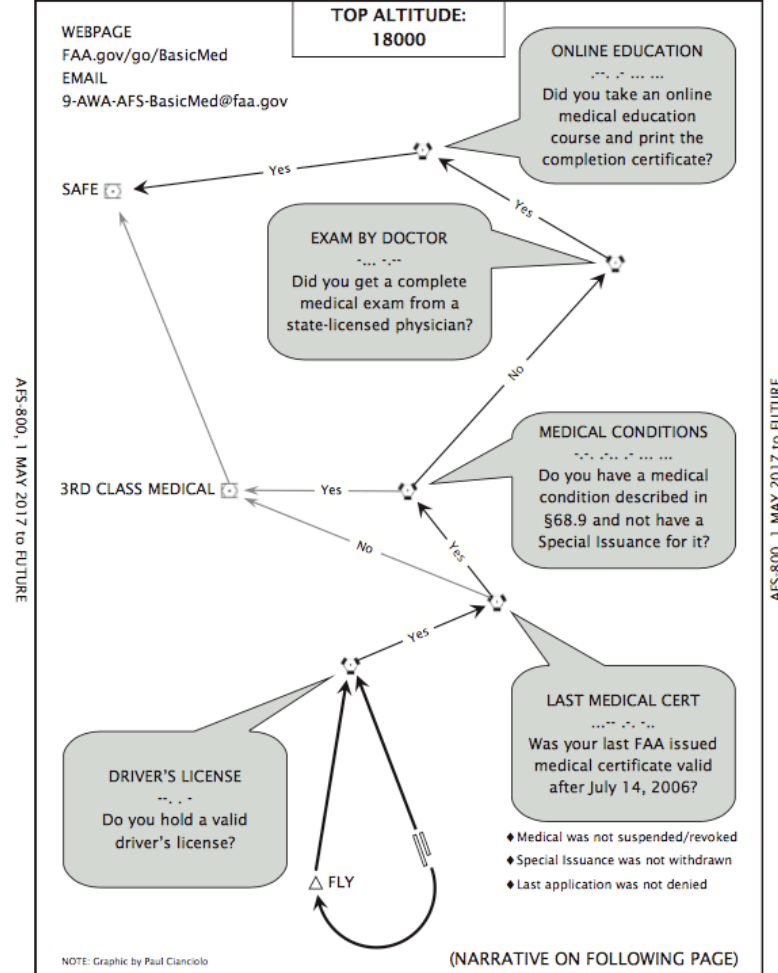
BasicMed

(BMED1.FLY)

NATIONAL AIRSPACE SYSTEM (NAS)

BASICMED ONE DEPARTURE

U.S.A.



BASICMED ONE DEPARTURE

U.S.A.

(BMED1.FLY) 1 MAY 17

NATIONAL AIRSPACE SYSTEM (NAS)

BasicMed

(BMED1.FLY)

NATIONAL AIRSPACE SYSTEM (NAS)

BASICMED ONE DEPARTURE

U.S.A.

BASICMED DEPARTURE ROUTE DESCRIPTION

THE AIRMAN MUST: Meet certain requirements to be eligible to fly under BasicMed ...

1. The airman must hold a valid and current U.S. driver's license.
2. The airman must have held a FAA medical certificate at some point after July 14, 2006. The most recent certificate must not have been revoked or suspended. If the certificate was associated with a special issuance, that special issuance authorization must not have been withdrawn. The most recent submitted application for a medical certificate must not have been submitted and denied.
3. The airman must not have a mental health disorder, neurological disorder, or cardiovascular condition as described in 14 CFR part 68.9 unless the process for obtaining a special issuance authorization for that condition has been completed.
4. The airman must receive a comprehensive medical examination from a state-licensed physician using the FAA BasicMed checklist.
5. The airman must complete an online BasicMed medical education course and retain the completion certificate.

THE AIRCRAFT MUST: Not be authorized to carry more than 6 occupants or have a maximum take-off weight more than 6,000 pounds.

THE OPERATION MUST: 1) Carry no more than 5 passengers; 2) Remain within the United States and maintain 18,000 feet or below; 3) Fly at 250 KIAS or less; 4) Not offer service for compensation or hire.

THE PILOT MUST: Retain the signed comprehensive medical examination checklist and BasicMed online course completion certificate in logbook, and the PIC must carry driver's license when operating under BasicMed.

BASICMED NOTES:

- ◆ No operations during medical deficiency (14 CFR part 61.53)
- ◆ May operate day or night, VFR or IFR
- ◆ Must be PIC; May not act as safety pilot unless also acting as PIC
- ◆ May store documents as digital copies in electronic logbook
- ◆ Operational limitations apply to whole flight, from take-off to touch-down
- ◆ Instructors receiving compensation for flight instruction may operate under BasicMed

AFS-800, 1 MAY 2017 to FUTURE

AFS-800, 1 MAY 2017 to FUTURE

BASICMED ONE DEPARTURE

U.S.A.

(BMED1.FLY) 1MAY17

NATIONAL AIRSPACE SYSTEM (NAS)

Federal Aviation
Administration

Federal Aviation Administration
SAFETY TEAM

Conditions not allowed under BasicMed

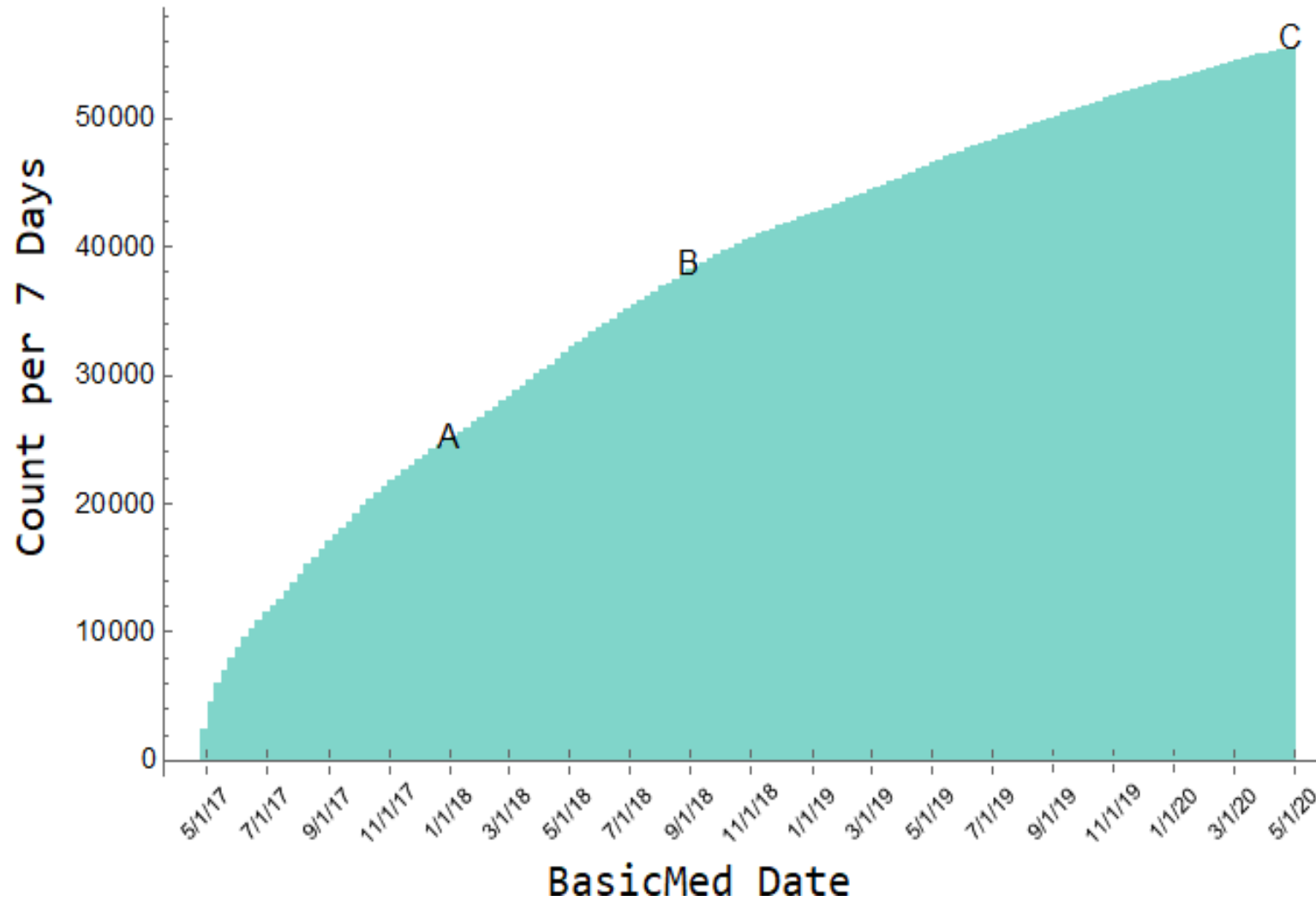
- Certain mental health, neurological, or cardiovascular conditions, would require a Special Issuance first.

- **Part 68 is an “operational” rule. It is not medical certification, but an alternative. Part 68 (BasicMed) is the responsibility of the FAA Flight Standards Service (AFS).” AAM supports and collaborates with AFS on the medical issues that arise with BasicMed.**
- **Final Rule was published in January 2017**
- **Short Title – BasicMed – implemented May 1, 2017**
- **14 CFR Part 67 has not changed and third-class medical certification remains the same**

- **Airmen reported as having a DUI within the last 2 years on the National Drivers Registry**
- **Hotline complaints alleging airmen to have conditions that would make them ineligible for BasicMed**
- **Airmen found to have falsified their most recent application for airman medical certification.**

- **State licensed physician reports that they signed off on a BasicMed CMEC, realizes that the airman did not reveal all medical conditions or medications documented in the health care systems electronic healthcare records system.**
- **Re-examination of an airman's qualifications for BasicMed if urgent and credible information is received suggesting that they may have one of the conditions requiring evaluation by the FAA special issuance process.**

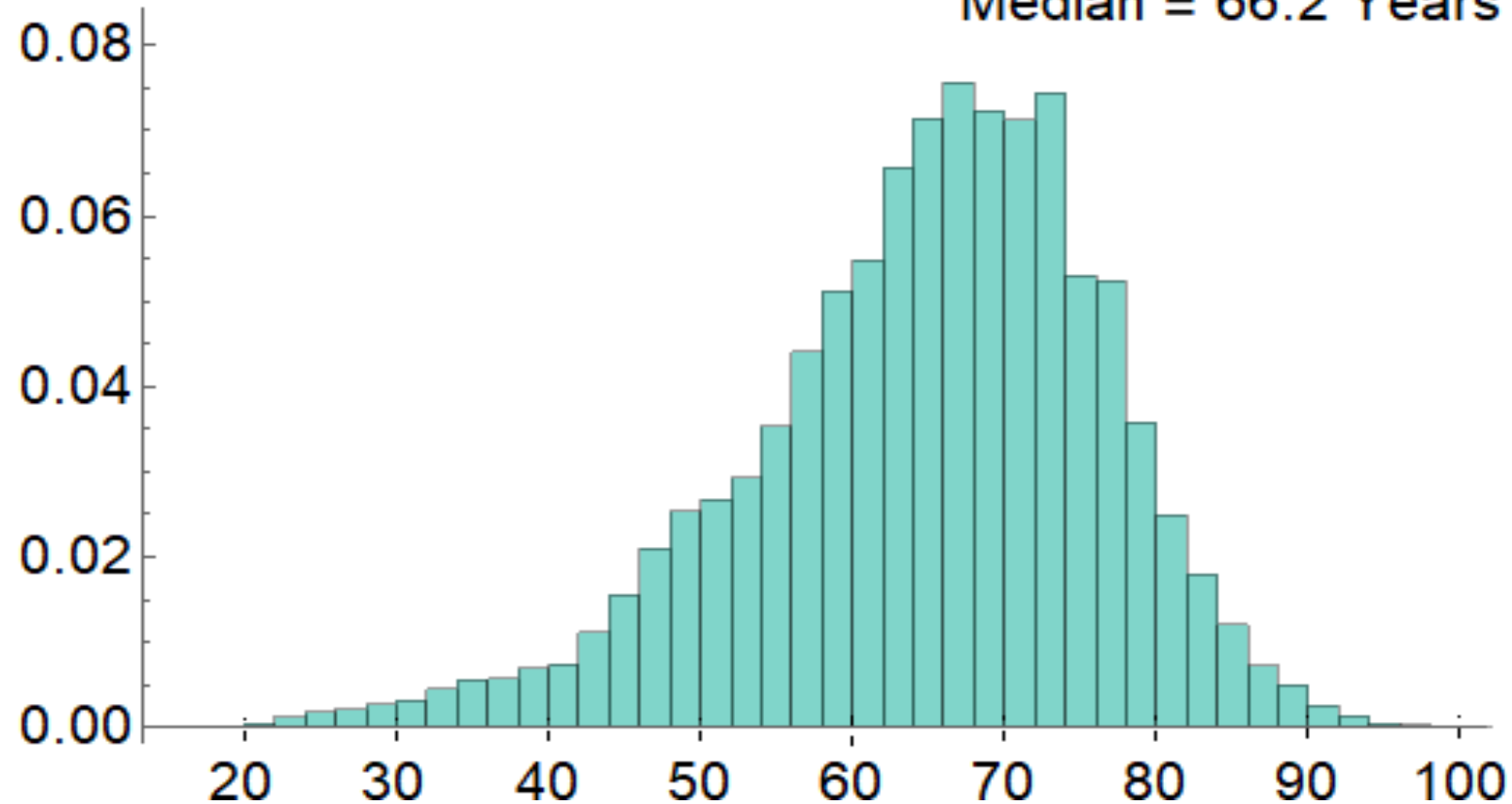
Number of BasicMed Pilots Over Time



Current Age in Years BasicMed Pilots

Proportion

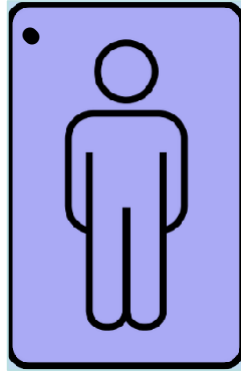
Median = 66.2 Years



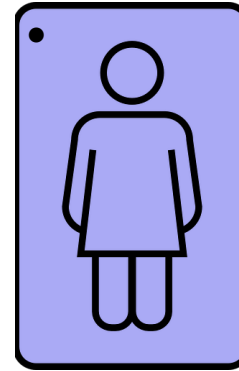
**Average Age is 66.2 years old
Max = 101.8 and Min = 17.6**

**7.2% (4,056) are 80 years of age or
more**





42,947
(96.9%)

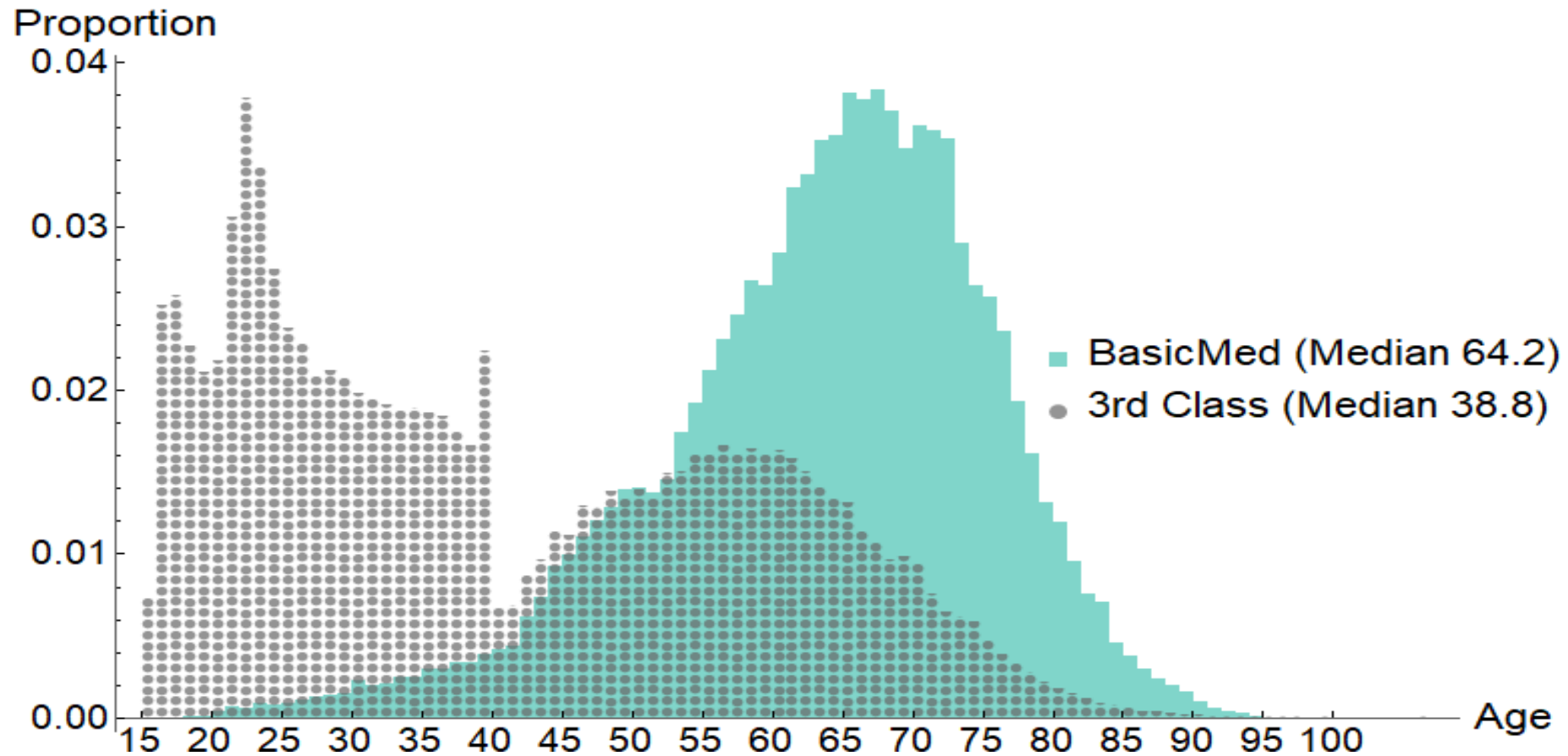


1,299
(3.1%)

8.5% of pilots holding a valid 3rd-class medical certificate are women

•

Age at Last Exam 3rd Class vs Age at BasicMed Date



4/30/2020

- **27% (15,224) with last medical certificate being a Special Issuance**
- **6% of 3rd class pilots have a Special Issuance**

William Thrift MD

- Senior Aviation Medical Examiner
- 928 277 9724
- wjthrift@gmail.com

• **QUESTIONS?**