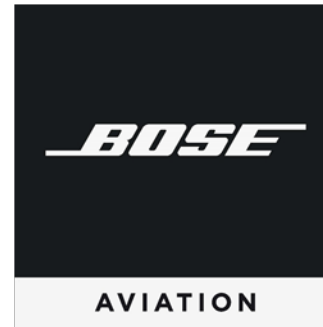


Presented by:



Supported by:



MINDSTAR AVIATION

Welcome to the EAA Pilot Proficiency Center

Jeremy Desruisseaux

- EAA Director of Flight Proficiency Programs

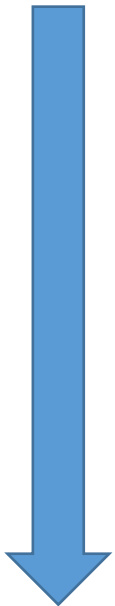


EAA 'Sim' Training & Pilot Proficiency

A Brief History

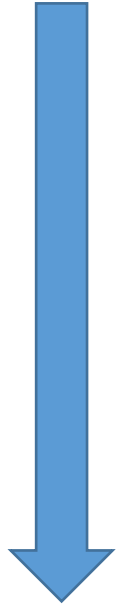
EAA

KidVenture
2007



EAA

Learn to Fly
2009



EAA

IFR Proficiency Center
2014

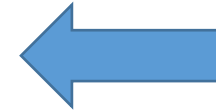


EAA Pilot Proficiency
Center
2015-2021



IMC Club

Founded 2010
IFR Proficiency
Center at
AirVenture
2012-2013



2022: EAA Aviation Center's Pilot Proficiency Center



Proficiency Prevents Peril

CFI to CFI Clinic

Karen Kalishek

- Independent flight instructor powered and glider
- Designated Pilot Examiner
- NAFI Board Chair
- 9 year Pilot Proficiency Center volunteer
- ATP, CFI, CFII, MEI, CFI-G, AGI, IGI
- FAA Gold Seal Instructor
- Three-time NAFI Master Flight Instructor
- Major in Civil Air Patrol
- FAASTeam Lead Representative and WingsPro
- 2019 National FAASTeam Representative of the Year
- EAA Chapter 651 Treasurer for 16 years – and counting
- Member of General Aviation Joint Safety Committee, FAA Surface Safety Group, WINGS Industry Network, Runway Safety Council
- RV6 owner



**NATIONAL ASSOCIATION
OF FLIGHT INSTRUCTORS**
Excellence in Flight Instruction

CFI to CFI Clinic

- Why CFIs?
- Proficiency prevents peril
- Accident data and clinic topics
- Approach to learning
- CFI centered learning at AirVenture
- What next?

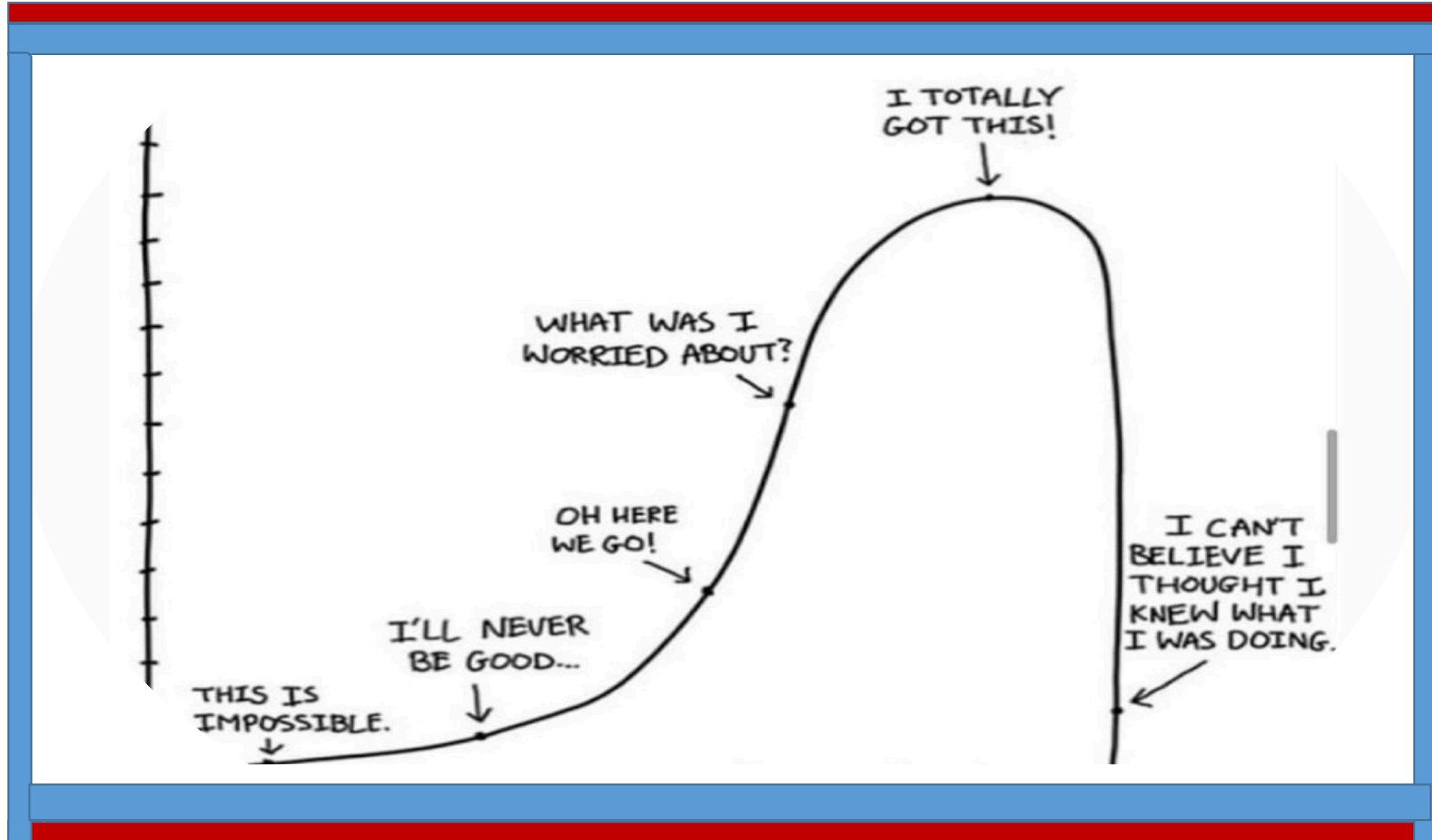


EAA^{CFI} & Pilot Proficiency Center

- Volunteer CFIs > 85 annually
- CFI to CFI Clinic participants 66
- TOTAL > 151**
- Other Clinic participants 726
- **Ratio 4.8 : 1**



CFI Learning Curve



CFI Skill Development

- How does CFI skill development occur?
- Individual trial and error?
- Does experience = expertise?
- Inconsistency in practice throughout the flight training community
- Habits form



Habits

“Nothing so needs reforming quite as much as other people’s habits”

Mark Twain

Proficiency Prevents Peril

- Proficiency : a high degree of competence or skill; expertise
 - [experience](#) · [ability](#) · [competence](#) · [excellence](#) · [mastery](#) · [prowess](#)
· [professionalism](#) · [finesse](#) · [effectiveness](#) · [accomplishment](#) · [expertness](#)
· [talent](#)
- Prevent : keep (something) from happening or arising
 - [stop](#) · [avert](#) · [nip in the bud](#)
- Peril : serious and immediate danger
 - [jeopardy](#) · [risk](#) · [hazard](#) · [uncertainty](#) · [menace](#) · [threat](#) · [problem](#)

Peril to Whom – to What

- Safety - Learners, passengers, self, others
- Finance, Reputation
- General Aviation

May 26, 2022

Student pilot aged 18 crashed ¼ mile from airport

Reported as both initial solo and recently soloed

Pattern work

Student reported engine problems

“I don’t know what to do”

Died four days later

- Proficiency ***Helps*** Prevent and ***Manage*** Peril
 - Not entirely avoidable, risk is inherent in aviation

General Aviation Accident Aircraft by Flight Purpose and Aircraft Category, 2019

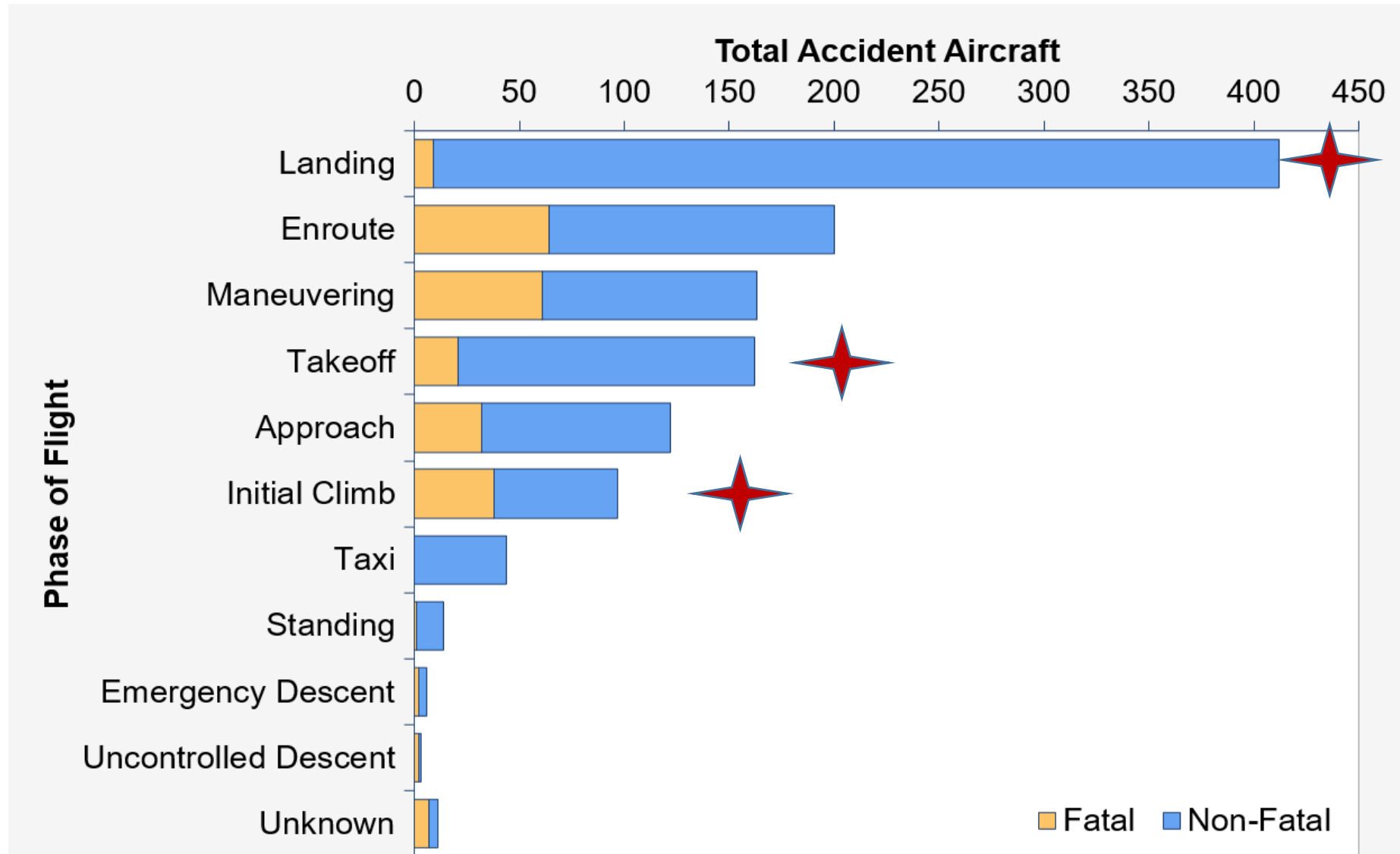
data updated December 15, 2021

Flight Purpose	Fixed Wing	Helicopter	Other	TOTAL
Personal	743 92% of total personal	29	37	809
Instructional	178 89% of total instructional 17% of fixed wing accidents	19	2	199
Other (16 categories)	148	64	14	226
TOTAL	1069 Three per day average	112	53	1234

Phase of Flight for General Aviation Accidents, 2019

[Annual Summary of](#)

[US Civil Aviation Accidents \(ntsb.gov\)](https://www.ntsb.gov)

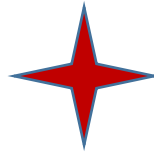


PHASE OF FLIGHT DEFINITIONS

LANDING

- **From the beginning of the landing flare until aircraft exits the landing runway, comes to a stop on the runway, or when power is applied for takeoff in the case of a touch-and-go landing. This phase of flight *includes the following subphases:***
 - Flare
 - Landing roll
 - Aborted landing after touchdown

PHASE OF FLIGHT DEFINITIONS



TAKEOFF

- **From the application of takeoff power, through rotation and to an altitude of 35 feet above runway elevation.** This phase of flight *includes the following subphases:*
- **Takeoff**
- **Rejected Takeoff**



INITIAL CLIMB

- **From the end of the Takeoff subphase to the first prescribed power reduction, or until reaching 1,000 feet above runway elevation or the VFR pattern, whichever comes first.**

Aborted Takeoff



8/7/2022

Aborted Takeoff



Power Loss Immediately after Liftoff



Power Loss Immediately after Liftoff



Engine Failure after Takeoff

Decision to Land Straight Ahead



Engine Failure after Takeoff

Decision to Land Straight Ahead



Engine Failure after Takeoff

All Ten Survived



8/7/2022

Pilot's First Flight in New Plane Ends in Crash

“...just a matter of seconds between the pilot taking off and then crashing.”



Engine Failure after Takeoff

No injuries





Engine Lost Power After Takeoff

Stall – Moderate Injuries

**Solo
Student
Pilot**



“Pilot may have hit crosswind, causing crash”



Caught in a Crosswind

Winds 7-10 knots



Failed Go Around



8/7/2022

Failed Go Around



June 2, 2022
Low Altitude Power Issue After Takeoff
Two CFIs onboard



8/7/2022

Accident Data and Clinic Topics

- **Takeoff/Initial Climb and Landing are the phases relating to highest accident rates**
- FAA minimum standards $\neq$ 'real world' proficiency
- Enough attention to teaching aborted takeoffs, low altitude power loss, crosswind landings, go arounds?
- Clinic focus on these areas
- Training for proficiency
- Discussion, Exercises, Debriefing in CFI to CFI Clinic

CFI to CFI Clinic Exercises

- **Ground Hog**
 - Making takeoff go/no go decisions, selecting and using abort points
 - Parlin Field Airport, New Hampshire
- **Now What!**
 - Dealing with power loss after takeoff, pre-departure planning
 - Tweed New Haven Airport, Connecticut
- **Plenty of Spice at Spicewood**
 - Handling gusty crosswind landings
 - Spicewood Airport, Texas
- **Tally Ho**
 - Managing go arounds and distractions
 - Leesburg Executive Airport, Virginia



Approach to Learning

- Be open minded
- Integrate new ideas, tips, techniques
- Rethink habits
- Engage with others
- Participate in discussions
- Share your thoughts and experience
- Value observation
- Give feedback
- Pursue continuous improvement and best practices



CFI - Centered Learning at AirVenture

- Wednesday CFI Open House at the PPC
 - 5:30 – 7:30
 - Redbird hands-on practice
 - Crosswind contest
 - Short presentation
- NAFI Professional Development Center
 - 32 CFI-focused presentations by well-known subject matter experts
 - Booth 316
 - See handout in PPC bag



What Next? Ripple

- Share your knowledge
- Flight instructing, PPC volunteer, FAA *WINGS* programs, etc.



One Final Thought

“We are what we repeatedly do.
Excellence, then, is not an act, but a
habit”

Aristotle

Thank You for Attending
Fly Safely, Have Fun, Keep Learning !



Karen A. Kalishek

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920-819-4774