# DFC SAFETY SEMINAR

January 21, 2021

#### Agenda

01

Meet Your DFC Safety Team 02

Safety Stats & Safety Culture Defined

03

Safety Plans for 2021 at DFC



# 



"DBETTER SLOW DOWN TO ENJOY

quickmeme.com



# SAFETY FIRST

Or at least in the top five anyways.

#### Introductions

**Lauren Scott** is a CFI at DFC, instrument and multi-engine rated. She was trained at Purdue University in the Professional Pilot program. Took many years off to focus on raising a family, and returned to flying in 2018.

**Fernando Molina** is a CFI, Commercial single and multi-rated with instrument. He was a Weapons Systems Officer (backseater) in F-15Es, retiring in 2014 and is currently a fighter flight test analyst at Nellis Air Force Base. He provides content to the flying instructional YouTube channel "Learn The Finer Points" and is applying to become a local FAASTeam member.

**Alan Zwick** is an ATP, CFI, CFII, and MEI. He flew the KC-135R, T-37, T-38, and U-2 in the USAF from 1986-2000. He is currently a Southwest Captain based at LAS. He has owned a Grumman AA-1B Yankee, and a AA-5B Tiger. He joined DFC July 2020 and looks forward to sharing his passion for General Aviation with other members.

### The State of General Aviation Safety

-Commercial aviation in the U.S. boasts a very high aviation safety record (only 1 fatality on an airline flight in 2018, according to Flight Safety Foundation at <a href="https://www.flightsafety.org">www.flightsafety.org</a>)

-While non-commercial fixed-wing aviation safety has been rising, sadly our accident rates are still much higher. According to the most complete, recent Joseph T. Nall report for 2018, there were 1033 accidents, including 277 fatalities.

AOPA video overview of the latest Nall Report

#### Figure 1.4: General Aviation Accidents in 2018

2018 Non-commercial fixed-wing

	Accidents	Fatal Accidents
Pilot-Related	<b>675</b> 65.5%	<b>89</b> 54.3%
Mechanical	<b>186</b> 18%	<b>11</b> 6.7%
Other / Unknown	<b>170</b> 16.5%	<b>64</b> 39%

Figure 1.6: Type of operation

2018 Non-commercial fixed-wing

	Accidents	Fatal Accidents	Fatalities
Air Drop	<b>1</b> 0.1%	<b>o</b> 0%	<b>o</b> 0%
Personal	<b>769</b> 74.4%	<b>134</b> 80.7%	<b>213</b> 78%
Instructional	<b>172</b> 16.7%	<b>12</b> 7.2%	<b>24</b> 8.8%
Public Use	<b>5</b> 0.5%	<b>o</b> 0%	<b>o</b> 0%
Positioning	<b>15</b> 1.5%	<b>4</b> 2.4%	<b>7</b> 2.6%
Aerial Observation	<b>13</b> 1.3%	3 1.8%	<b>4</b> 1.5%
Business	19 1.8%	<b>7</b> 4.2%	<b>15</b> 5.5%
Executive / Corporate	<b>3</b> 0.3%	<b>o</b> 0%	<b>o</b> 0%
Other work use	<b>28</b> 2.7%	<b>4</b> 2.4%	5 1.8%
Other or unknown	<b>8</b> 0.8%	<b>2</b> 1.2%	5 1.8%

### Culture of Safety

From AOPA Article: "Safety: What is a Safety Culture?" by AOPA Air Safety Institute Staff

"'We are what we repeatedly do'...our actions define us. While we may have the best intentions, if we don't act in accordance with those intentions, they are for naught. This concept applies to everything we approach in life, and especially so in aviation, where as we know, the margins for error are thinner.

"Every pilot intends to be a safe, conscientious pilot. Yet every year, pilots do things... that are counter to those intentions....We are what we repeatedly do.

"So if we as pilots consistently act in a safe manner, we start creating an individual set of good practices that then carry over to whatever group we're a part of. This is what becomes our safety culture."

# Culture of Safety (cont.)

"So for pilots, a safety culture could be...: "the set of shared attitudes, goals, and practices of everyday existence toward increased safety in aviation."

Therefore: "What can a pilot do every day to instill a more safety conscious approach to our flying?"

## Developing a Culture of Safety at DFC

How do we encourage and develop a strong Culture of Safety at DFC?

- -Talk about it often!
  - -Offer monthly safety meetings
  - -Train pilots in ADM and safety/risk management in initial, ongoing training, and checkouts
  - -Offer safety focus of the day, emergency procedure of the day
  - -Encourage, highlight and reward participation in the FAA WINGS pilot proficiency program
- Establish a "safety bulletin board" at the clubhouse to post safety-related notices
- -Offer remedial training when necessary
  - -Safety concerns can be reported to chief CFI (Gary), BOD, or Safety Team for review and corrective action
- -Offer a clear way to report safety issues, suggestions, or concerns
  - -report/check aircraft maintenance squawks in Flight Schedule Pro

# safety@desertflyingclub.com

# Daily Safety Focus EP of the day

#### Desert Flying Club EP of the Day

	EP of Day
1	Eng failure on take-off (no runway remaining)
2	Avionics failure (pick one or total failure)
3	Pitot static Failure (total or pick clogged static port or pitot tube)
4	Smoke and/or fumes in the cockpit
5	Wingtip electrical fire
6	Engine fire on start
7	Forced landing (partial power or no power)
8	High oil pressure/loss of oil pressure/Slowly decreasing oil pressure indications
9	Bird strike (pick a location and amount of damage and discuss)
10	Inadvertent flight into IMC
11	Stuck/damaged flight control (pick one -what are the effects? How to recover with it)
12	Cockpit electrical fire
13	Icing on strut or other surface (high wing) or canopy screen wings (low wing)
14	Engine failure on takeoff (prior to rotate)
15	Landing with a flat tire (pick nose wheel or main tire and discuss)
16	Throttle cable failure (stuck in intermediate RPM or stuck at full RPM)
17	Carbon monoxide in the cockpit (how? What to do?)
18	Stall/Spin avoidance and recovery
19	Magneto malfunction (indications, what to do about it)
20	Engine failure on takeoff (< 1000 ft)
21	Flap malfunction

# Daily Safety Focus Topic of the day

#### Desert Flying Club Topic of the Day

	Topic of Day
1	Risk Management/Aeronautical Decision Making (PAVE, IMSAFE, 3Ps, 5Ps)
2	Review/discuss personal minimums
3	Loss of control accidents
4	Controlled flight into terrain
5	Spatial disorientation
6	180° turn after entry into IMC
7	Turbulence, ways to detect (weather products)
8	5 stages of thunderstorms
9	Types of Icing
10	Filing a VFR/IFR flight plan in-flight
11	Types of airspace (clearance required, equipment required, VFR minimums)
12	Cockpit management with electronic devices (divided attention, prioritization, how to
	recover if they fail, etc.)
13	Runway incursion avoidance (review runway markings, clearances required for
	towered, non-towered)
14	Midair collision avoidance (high risk areas, scan techniques)
15	What is required for airworthiness?
16	Weight and balance (talk about it, dangers of excessive forward/aft CG, out of limits,
	hand calculate it for today's flight using the POH/AFM)
17	Right of way rules
18	How to safely recover if lose lighting at night
19	Cabin door/storage door unlatched/unsecure in flight
20	Fuel management (indications, techniques for monitoring, indications of abnormal high
	fuel flow or a leak)
21	Safely regaining proficiency after not flying for a period of time

## Daily Safety Focus

EP and Topic of the day

- Make some safety topic a part of your daily safety routine and it will soon become habit pattern
- Safety studies show that regular Safety focus in flight programs and continuation training (such as WINGS courses) significantly lowers accident risk

#### **HOW IT WORKS**

- EP of the day and a Topic of the day will be posted at the entrance to DFC
- Take a look at the day you are flying and discuss that topic as part of your flight brief
  - Doesn't have to be more than 5 minutes, but well worth the review
  - Make it specific to your flight that day (weather, area you will be flying, aircraft, passengers, etc)
- Make it part of your daily flight briefs or assign as homework to students
- Look up the real references, if possible look it up in the POH, PHAK, AFH, etc
  - AOPA and FAASafety.gov have great resources for many subjects

#### FAAST WINGS Program

AC 69-91J Dated: 2/16/11 outlines WINGS-Pilot Proficiency Program

#### -Program Purpose

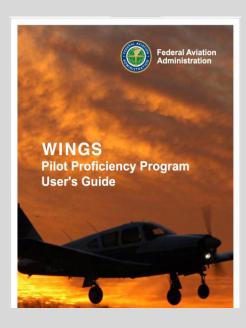
- -Reduce GA accidents through educational opportunities to assess and manage risk
- Increase pilot proficiency
- Pilots who are proficient are more confident and enjoy flying more.

#### -How WINGS Works

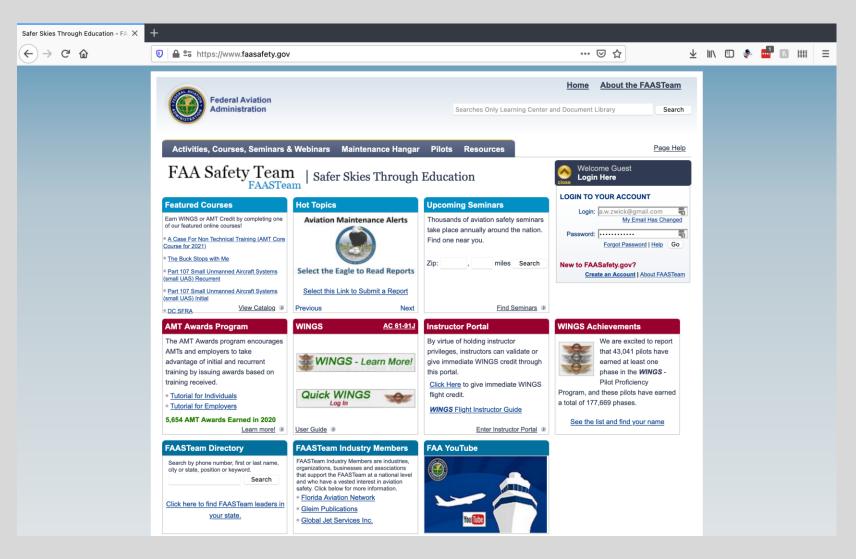
- Fly a WINGS flight with a CFI
- Attend a Safety Seminar (like what you are doing today!)
- Attend approved Webinar or Course (FAA, AOPA, NAFI, etc)
- WINGS participation counts for your flight review

## How to participate in WINGS

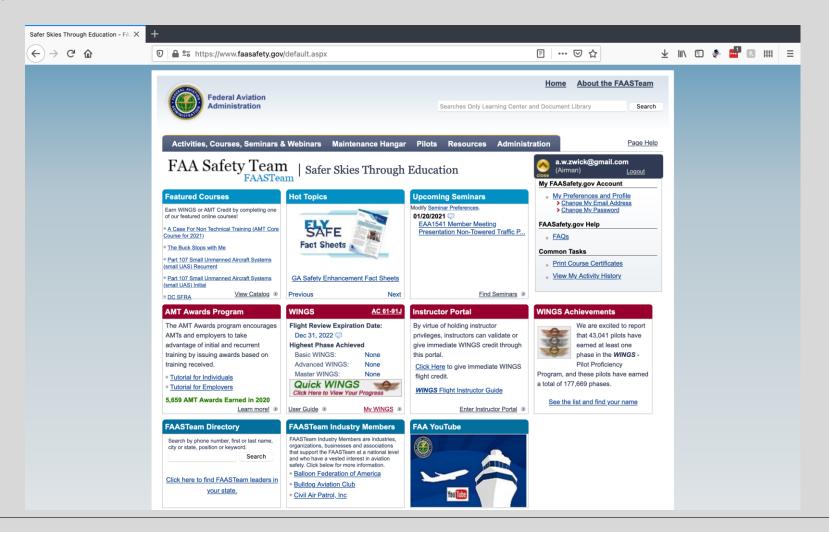
- -Go to FAA Safety Homepage: www.faasafety.gov
- -Create an Account
- -My Preferences and Profile
- -WINGS Profile



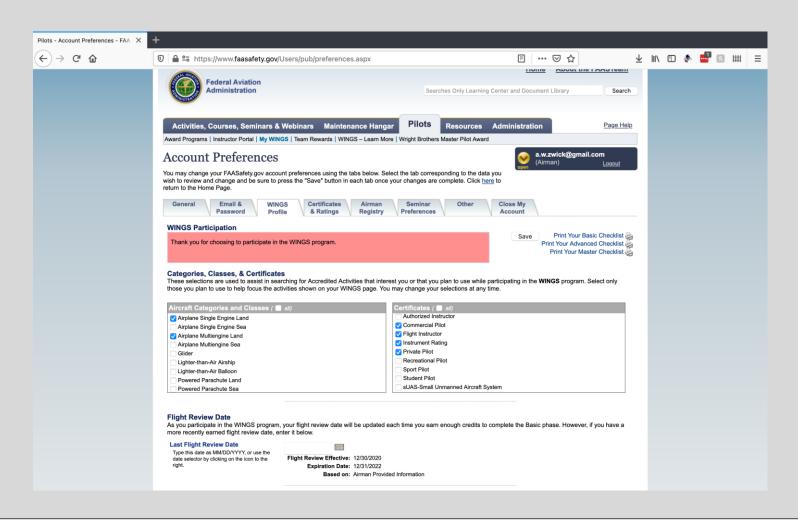
## FAA Safety Homepage: www.faasafety.gov



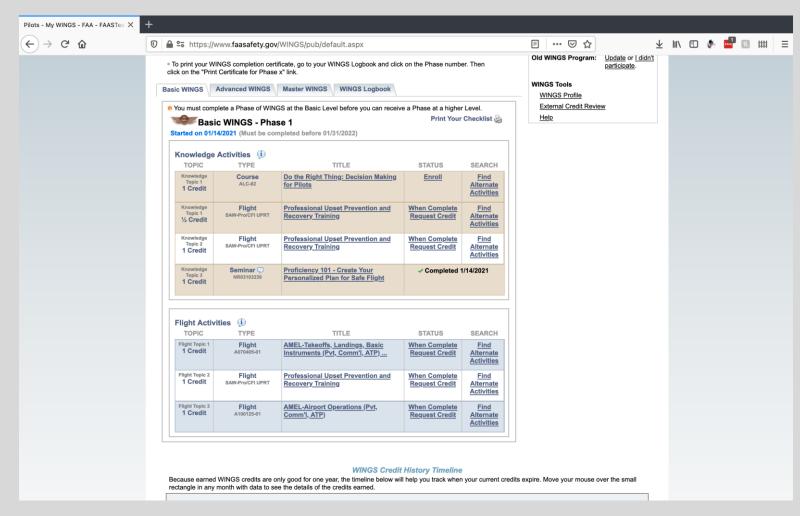
## My Preferences and Profile



#### WINGS Profile



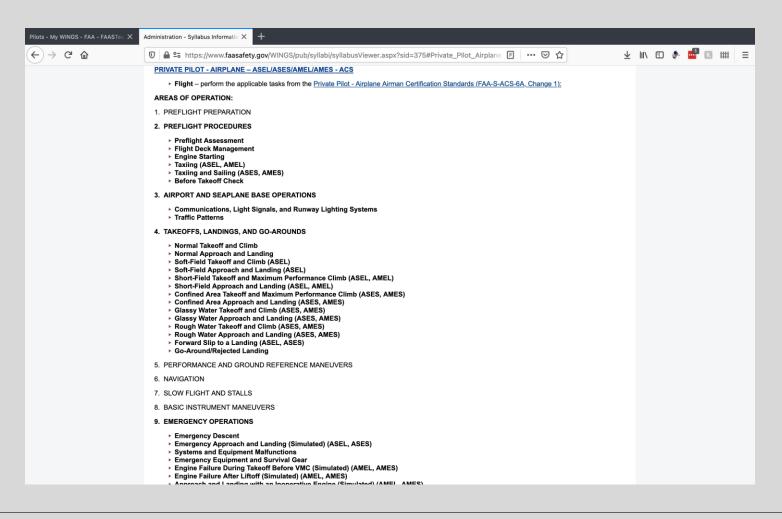
## My WINGS



#### WINGS Checklist



## WINGS Flight Syllibus



#### WINGS Bottom line, What's in it for me?

- -Becoming a more confident and proficient pilot
- -Credit for your flight review after completing a WINGS phase
- -You will enjoy flying more and your passengers will be impressed with your new skills
- -Complete one WINGS activity each month and be entered in a yearly DFC drawing for cool prizes

### Safety Seminar Topic Ideas

#### -Suggested topics:

Loss of a/c control

Radio comms/ procedures at towered and non-towered airports

Weather briefings

When to declare an emergency/what to expect

Developing personal minimums

Visiting fun and new locations

Preparing for check rides

Mountain flying hazards

Other ideas? Please email safety@desertflyingclub.com

#### **Upcoming 2021 Safety Seminars**

Feb 18 – Aeronautical Decision Making

Mar 18 – Weather Briefings

Thank you for joining us tonight! Let's work together to make 2021 our safest flying year yet!