

Ethnographic Research of General Aviation Safety Culture

Summary Report to the General Aviation Joint Steering Committee

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In conjunction with General Aviation Joint Steering Committee (GAJSC) research on measuring, analyzing, and influencing safety culture, a subgroup of experts (“the research team”) conducted ethnographic research using social media for insights into pilots’ opinions and actions with respect to federal aviation regulations, government and industry guidance, and safety.

Past general aviation safety research largely has focused on fatal accidents and attempted to gain insight into pilot behavior and decision-making through inference from post-accident analyses. In contrast, this research involved direct observation of pilots posting about their opinions, actions, and behaviors on websites including cirruspilots.org, lancairtalk.net, vansairforce.com, Facebook, and YouTube; GA print media; and commercial web-based pilot training sites. The researcher team effectively “stood on the street corner” of GA media and observed pilots’ every day thoughts, opinions, and discussions to provide insights into general aviation culture.

Summary Notes and Recommendations

- The research team found several distinct kinds of behaviors indicative of positive and negative safety cultures. Evidence of poor safety cultures was demonstrated by pilots of all backgrounds and certificates, from students to professional pilots. Research suggests that type clubs generally, although not always, have better safety cultures—supporting and encouraging aspects of safe flying. Many social media aviation groups, however, included pilots expressing disdain for regulatory compliance, operating limitations, and operating best practices. Also noteworthy was the overall poor levels of aeronautical knowledge displayed by many, including CFIs.
- The research was conducted solely using online sources. The researcher team acknowledges that some of their observations may have related how online mediums (*e.g.*, anonymity) impact conduct and culture, rather than general aviation culture itself.

- Multiple researchers noted a lack of awareness about authoritative resources for aeronautical information, such as FAA documents and aircraft manufacturer publications. Some comments appeared to suggest an aversion to seeking authoritative information, or an aversion to seeking deeper understanding and knowledge beyond rote answers, and or an aversion to continued training and education.
- The research team cited a disturbing lack of knowledge and professionalism exhibited by many—in particular CFIs—and suggested that current mechanisms to instill or promote professionalism, such as the mandatory CFI professionalism module in recurrent training, may be ineffective.
- Multiple researchers observed conversations and conduct suggesting some pilots believe regulations and safety recommendations conflict with “fun flying.” This seemed to suggest a potential misperception by some about the level of risk accepted in certain illegal and or unsafe conduct.
- Some researchers noted an egregious and disturbing disregard for regulations and safety in videos posted online documenting dangerous flying behaviors. The trend to video exhibitions of dangerous flying behavior likely encourages more unsafe and illegal behavior, in particular in light of a lack of consequences (*e.g.*, FAA intervention).
- Multiple researchers observed conversations attempting to justify illegal and or unsafe conduct as legal and or safe. Some seemed to assume that conduct that may be permissible under the regulations must also be safe.
- Comments taken from individuals and groups in public forums indicate that GA has much room for improving safety culture. More research is necessary to identify the negative sub-culture(s), the reasons for it and to find ways to positively influence those groups. Future research needs to include lessons learned from this research.

The analysis of each researcher is presented below.

Researcher 1

One common theme found across several online groups (Lancair, Vans, and a local seaplane group) was an accepting attitude towards low altitude, maneuvering, or buzzing flight. The apparent consensus of these pilots was that low altitude maneuvering flight is safe and legal; a review of regulations (14 C.F.R. § 91.119, minimum safe altitudes), NTSB ALJ decisions, and

accident reports indicates otherwise. Vans VAF Forums

(<http://www.vansairforce.com/community/archive/index.php?t-40917.html>) included discussions of the legitimacy of high speed, low altitude passes in 96 posts from 61 different authors. Many suggested that they believed high speed passes down runways were legal, and seemed to equate legal flying behavior with safe flying behavior. A few posters admitted to being violated or having an FAA enforcement action opened for such behavior. One sage flight instructor stated:

Interesting posts. Let[']s see if I can summarize:

The rules are for everyone else, not me.

I can do whatever I want, as long as I'm willing to lie about it.

If I do it at some other airport, it's okay.

If someone reports me for doing something wrong, they're the bad guy.

If no one sees me doing it, no problemo.

If I'm not sure it's okay, I'll do it anyway - easier to ask forgiveness rather than permission.

What happened to being a good neighbor? What happened to the rules? The more noise we make close to the ground and the more people we aggravate, the sooner we end up [o]sing our priv[iledge] of flight. Sometimes, even being "right" doesn't matter. Have fun and fly safe.

Another group (the Lancair community) advocated for flying a non-standard traffic pattern (1500-foot above ground level (AGL) because their aircraft are “fast.” When questioned about this, some of the pilots expressed a concern for being able to execute a safe landing in the event of a loss of power in the traffic pattern. The group persisted in advocating for flying a non-standard pattern despite being shown safety data to the contrary. Their opinions are supported by numerous certified flight instructors (CFIs) who conduct transition training and recurrent training in their community. Despite these concerns, members of the same community posted videos showing low altitude flying over the desert southwest, off the coast, and in other locations.

YouTube revealed several videos documenting dangerous flying behaviors. A search of YouTube for “airplane waterskiing” revealed numerous examples of aircraft pulling water skiers on lakes and rivers and aircraft “skiing” on populated lakes (*i.e.*, putting their tires on the water). Other examples posted on YouTube show pilots videoing themselves buzzing runways, buzzing

boats, and performing low altitude aerobatics. This behavior is seen in other areas on social media outside of aviation, including people videoing themselves performing dangerous stunts.¹

On cirruspilots.org, a website for pilots who own and operate Cirrus SR20 and SR22 aircraft, several pilots indicated a willingness to operate contrary to the Cirrus Airplane Flight Manual (AFM). These pilots admitted to, and supported the idea of, not installing the CAPS (Cirrus Airplane Parachute System) safety pin in the actuation handle following flight. Their justification was that no incident involving an inadvertent activation had occurred. One pilot advocated for getting rid of the safety pin altogether.

Observations of a CFI Discussion Group on Facebook, intended for flight instructors to share information related to flight training, also were interesting. Participants varied widely: Some CFIs in this group are seasoned, many are newer to the flight training industry; some are working towards their CFI certificates, and some are returning to flight instruction after years of absence. Often, pilots training to become CFIs ask questions related to checkrides. Responses vary from sound advice to questionable advice, including recommendations to cut corners, violate regulations, and operate unairworthy aircraft. CFIs are often quick to offer advice but frequently the advice is not based on any FAA guidance or references. It is noteworthy that in a profession based on training standards, advice from CFIs deviates frequently from published standards. This is reflected by the actions and comments of pilots studied in the other groups.

Researcher 2

The PiperForum.com is made up of pilots who are Piper aircraft owners. Piloting experience among those on the Piper Forum varies. The forum includes active and retired airline pilots, flight instructors, corporate pilots, private pilots and, student pilots, all of whom have equal privilege with regards to commenting and opinion sharing.

The Piper PA-28 Cherokee is one of the most common single engine piston-powered airplanes used for pilot training and personal use. Considering that the PA-28 is one of the most popular aircraft in production and maintains a great safety record, the pilot group on this forum

¹ See: <https://www.youtube.com/watch?v=IMGUTeQZEu0>;
<https://www.youtube.com/watch?v=6OAEgPVcvhU>;
<https://www.youtube.com/watch?v=YI33b7yx6HI>;
https://www.youtube.com/watch?v=vdTrr_VRKgU

is, generally speaking, risk adverse and safety oriented. Many of the active members utilize the forum to improve the safety of their operations by asking questions and receiving feedback. Members with the higher post counts generally came from two categories: Either they were nurturing type—offering sound advice without criticism or judgement—or they were superior and patronizing, criticizing others and not contributing advice or support. The latter members, the “internet bullies” so to speak, could have had the effect of inhibiting the safety culture of the site by preventing posters from sharing opinions because of their fears of judgement. This effect is discussed later in this report.

Another apparent issue is pilot education. Many threads are created each day asking questions regarding elementary subjects that are very easy to find in FAA pilot resources. It appears that students are no longer familiarizing themselves with important FAA materials such as the Instrument Flying Handbook, Instrument Procedures Handbook, Pilot’s Handbook of Aeronautical Knowledge, Airplane Flying Handbook, Federal Aviation Regulations/Aeronautical Information Manual. Instead, it seems that many pilots are depending on forums and Google searches for information on regulations and technique.

Researcher 3

Researcher 3 observed discussions on Pilots of America. The Pilots of America, <https://www.pilotsofamerica.com/community/>, features multiple chat rooms categorized by topic, one of them being Pilot Training. Discussions on the Pilot Training forum were observed during 2018 and electronically saved if the observer felt they showed some indication of safety culture (either positive or negative). A total of 60 forum discussions were compiled.

Overall, the observations made of the Pilots of America forum were indicative of a positive safety culture in the GA flight training domain. Some of the main signs that point to this conclusion include: pilots’ willingness to ask questions, peer encouragement to know and understand relevant regulations, frequent use of “safety first” advice, and a trend toward peer recommendations to practice more and avoid complacency. There were some examples of behavior that would indicate instances of a negative safety culture, but those are the minority. The most common example was pilots asking questions that they should have known had they had adequate initial training or taken it upon themselves to self-study. In those cases, the other contributors generally pointed the inquiring pilot in the “right direction” but also gave him/her a

verbal “slap on the wrist” for not being adequately knowledgeable. This type of response is an indication of an overall positive safety culture for two reasons: 1) The peer pilots as a whole demonstrate an understanding of the rules and regulations and a willingness to aid other pilots, and 2) The community response as a whole makes it clear that having adequate knowledge of the rules is “a must,” and anything less is not acceptable.

Throughout the forum examples, there is also an overwhelming tendency toward a “safety first” attitude. There are instances in almost all 60 forum examples collected of pilots giving their peers advice along the lines of “practice makes perfect” and encouragement toward cautious decision-making. There seems, however, to be two general categories of pilots going through flight training. One category consists of pilots who are willing to take their time to practice and gain experience throughout (or in between) their training. The other category has pilots who are in a hurry to get through training. There are likely several reasons for being in either category, one being cost. This difference, however, could have an underlying effect on safety culture. A pilot’s motivations, like expertise vs expediency, could have a correlating effect on their breadth of knowledge and quality of their decision making.

Although the overall impression of safety culture derived from this particular forum was positive, the research noted that the focus was flight training. Those involved in flight training as students, or providing flight training as instructors, may be more likely have safety at the forefront of their thinking. Moreover, a positive safety culture in the flight training environment may not carry over into GA operations outside of the flight training environment.

Researcher 4

Researcher 4 evaluated numerous online discussion threads to assess pilot attitudes, discussions, opinions regarding aircraft operations, low altitude flying (buzzing or flat-hatting), medical compliance, procedural compliance, general aviation knowledge, and the desire to inform, mentor, and provide useful information.

Several sites were indicative of negative safety cultures, though the positive cultures may be masked. This is especially true for those attempting to provide information that is reliable, researchable, or contrary to popular opinion. Ridicule, aggression, harassment, and intimidation are rampant on many social media sites and can have a “chilling effect” on dialogue because individuals either do not want to be confronted with such behavior or have become weary from

the constant strife. Others were warier about their inputs. There are numerous references to “snitches get stitches,” as if those who are more compliance-oriented should be punished for questioning the legality of some operations.

This chilling effect is also apparent on CFI participation in sites that exhibit negative cultures. CFIs may choose to be silent rather than to be ridiculed. This chilling effect has an overall negative affect on the entire community as opportunities to provide reliable information are missed.

The more specialized or dedicated groups, such as type clubs or groups, generally reflect a more positive attitude and provide a wealth of useful and reliable information. The more general the group, the less reliable, more contentious, and more acrimonious are the negative culture influences.

There also appears to be a general lack of knowledge with regard to regulations and general flight science. Lift and energy management continue to be subjects of discussion that are rife with misinformation, continually perpetuated, and difficult to correct. For example, a seaplane instructor did not understand the concept of open and closed water, and did not understand where to turn to find such information. This led to a misconception about a regulation related to low flying over open water.

A continuing area of misinformation is low (and often high-speed) flight, which appears to be related to either a lack of familiarity with applicable rules, a willingness to violate the rules for “fun,” or a combination of both. There are many flight instructors and pilots who believe that flying low and fast is allowed in the airport environment at any speed and at any configuration, and regardless of the intent to land or not or to perform a go-around or to train for such events. In many cases, pilots believe that if they announce a low pass, that they can perform said pass over any runway regardless of obstacles, structures, or people in the vicinity. Some seem to believe that the FAA is an impediment to enjoying flying, and that the agency issues burdensome regulations that needlessly detract from the joy of flying.

Some exhibit a blatant disregard for factual information, and rely on incorrect information that they either have a bias for supporting and or were incorrectly taught. They may have incomplete or incorrect interpretations or mental models, or simply believe they “know best.” When presented with actual case precedent regarding instances of violations, many

participants attacked the information providers instead of objectively and rationally evaluating the information.

Ultimately, there is opportunity for greater study, perhaps in conjunction social scientists. The new landscape of social media is changing relationships and activities, and typical communication and mentorship patterns. Aviation safety specialists need to understand how social media is reflecting and changing safety culture, and how to influence it.

Researcher 5

Researcher 5 observed public and group aviation-oriented social media on FaceBook and Bulletin Boards for BeechTalk and the American Bonanza Society. Observations suggested that most pilots who participate reveal a true passion for flying and an unquenched thirst for learning and improving their flying skills. Photos and posts often portray great joy and accomplishment in achieving training milestones and from unique flying experiences.

There is a lot of great information on and quality learning through websites and social media. There is also, however, a certain level of boasting and one-upsmanship prevalent, combined with a great deal of hero worship. Certain participants are “internet heroes,” who dispense their opinions—often contrary to regulations or best practices—but who are revered for their experiences (or perceived experiences). In many cases, they are perceived to “know better” than the manufactures or regulators. These persons may post frequently, or they may post rarely. But questioning their opinions, even when done in a sincere desire to better understand what they are saying, often results in other participants “piling on” the questioner, belittling the questioner for questioning “the internet hero” or labeling the questioner as “stupid” for asking a question at all.

Persons who cite regulations, airframe and engine limitations, and other authoritative sources in the response to a question commonly receive one of three responses:

- (1) If the source answers a specific question that makes it easier for a pilot to do something, *e.g.*, confirms a simple fact or justifies a proposed operation, then citing the source generally receives “likes.”
- (2) If the person citing the source points the questioner to it with the assumption or advice the questioner go to the source to determine the answer, participants usually criticize that cite provider for not answering the question, or at the very least copying and

pasting the specific passage in the source that answers the original question. Online participants seems to not like to have to look things up or interpret them themselves—exemplified by the response “the purpose of this group is to answer questions. If I wanted to look it up myself I would not have joined this group” (quoted from the CFI discussion group).

- (3) If the source proves a proposed operation wrong or contrary to best practices, or questions the opinion of a “internet hero,” then the person citing that source is frequently belittled by other participants.

In sum, social media users generally appeared to like the citation of authoritative sources when it supports their intentions or past actions, and dislike the use of sources when it opposes their intentions or past actions. In most cases, users are not willing to read or interpret an original source themselves—they use social media as a shortcut researching information about flying. They generally want someone to validate what they want to do or to have done.

Several topic areas came up frequently:

- Regulation and Best Practices: Some exhibited an attitude that regulation gets in the way of fun and utility in flying, and that regulation alone is responsible for the high cost of flying. Participants often discounted Type Certificate and STC limitations and other manufacturer recommendations as outdated and or information driven primarily by legal departments to limit liability.
- Training and Proficiency: There is a paradoxical attitude that expresses training is important and valuable, while at the same time focusing on how to get by with minimum training; the lowest investment of time and money. For example, some participants argued that there should not be a flight review requirement, that there is no need for instrument recurrent training, and that it is acceptable to “fudge” currency in logs if needed.
- Maintenance: There is widespread discussion that recommended inspection, overhaul, and replacement schedules should have no bearing on light general aviation operations. Participants expressed views that maintenance recommendations primarily meant to sell parts and generate business for shops, and that airplane owners who proactively maintain their aircraft are uninformed. It was common to see discussions suggesting that engines should be overhauled on

condition (essentially, flown until failure), beyond the recommended Time Between Overhaul intervals. Few made the distinction among *inspection* (done every time you fly and as required by regulation, to determine airworthiness), *maintenance* (done proactively to maintain airworthiness) and *repair* (done to return to a state of airworthiness if maintenance efforts have failed or run their course). Some suggested that annual inspections do more harm than good. Some expressed opinions that inspection requirements should be eliminated, primarily to reduce costs.

- Instrument Flight Rules (IFR) Procedures: Many instrument-rated pilots do not appear to know the answers to basic questions about instrument flight rules and operations. This is evident not only in the questions posted, but in many of the answers as well. There is selective acceptance of regulation in many discussions. For example, one poster asked about how to obtain an IFR clearance at a non-towered airport without a Remote Communications Outlet (RCO) when conditions were 400 overcast. Most instructor responses correctly pointed to the nationwide IFR clearance delivery telephone number, and the local Air Traffic Control numbers contained in the Chart Supplement (often still called the A/FD). One CFII stated that at his home airport he takes off and flies toward a neighboring airport with an RCO about 40 miles away “just under the clouds,” and obtains his clearance in the air once he can communicate using that RCO. My response that this may meet the basic Visual Flight Rules weather minimums of § 91.155 (“one mile, clear of clouds” rule in Class G airspace) but perhaps not the minimum safe altitude requirements of § 91.119 was apparently deleted by the site administrator.
- Formation Flight: Amateur recreational formation flight is becoming very popular. Discussions centered on the added skill honed through formation flying, but also highlighted the bad decision making that can come from a false sense of “mission” among participants. The focus on the mission seemed to override discussion of potential hazards associated with the flight. Some examples of this bad decision making included: formation flying in “severe” turbulence; joining up on an another airplane to fly a partial panel approach in low instrument

meteorological conditions after the failure of an attitude indicator instead of diverting to close-by visual meteorological conditions, and making a formation flight in low visibility where one airplane landed off the runway on the wrong side of a tree line apparently because he could not see the runway. Recently, over 100 airplanes departed to EAA AirVenture Oshkosh when weather at Wittman Regional Airport (KOSH) was low-IFR and used as an excuse that the weather was good when checked two hours earlier.

- Low-altitude Flight: For many pilots, the sensation of speed seems to be a motivator. Speed is only evident relative to the ground or other objects. Justifications for low-altitude flight are common, including confusing the definitions of “open water” and “sparsely populated” areas. Commonly, discussion centers on making a radio call that the pilot is “going around” to somehow legitimize a high-speed low pass that violates Section 91.119 rules.
- Post-Crash Analysis: After a crash, there is frequently short-lived discussion of changes in equipment or risk management strategies. In a non-fatal accident or incident, there is also a tendency to highlight the skills of the pilot in handling the outcome, and downplaying the cause of the mishap or the event itself. For example, after a Jabiru crash offshore of Daytona Beach, Florida, the pilot admitted to investigators that he ran out of fuel short of his planned destination. Posters criticized local media for headlining this as a “crash,” instead just “landing on the water.”

Identifiable safety culture issues included a lack of understanding about the basics of aviating, of best practices for risk management, and of regulation and aircraft limitations; a desire for a quick answer instead of a thoughtful answer; and an idolization of perceived experts over authoritative sources.

Most people, however, who participate reveal a true passion for flying and an unquenched thirst for learning and improving their flying skills. This presents aviation educators with a tremendous opportunity to share knowledge by orienting responses less toward “no, you can’t,” and more towards “you can, if you take this into account,” citing authoritative sources.

Researcher 6

Researcher 6 observed discussions in a forum about IFR operations. All forum participants paid for access to the training scenarios and the forum discussions. Participants watched real life presentations describing scenarios, then interacted with other participants and an instructor regarding options for how to respond. One scenario was produced by a relatively low time GA pilot who is the host of the online series. In the segment he flew solo cross-country in a non icing certified aircraft in icing conditions, ignored oxygen requirements and made other noteworthy errors in aeronautical decision making. The discussions generally were thoughtful and safety-positive, even when participants missed relevant safety data or regulatory requirements. Participants considered both legal and safe conduct, best practices and personal limitations. Participants also seemed willing to question the decisions/recommendations of instructors.

Researcher 7

Researcher 7 reviewed CFI online discussion groups. Frequently, on the CFI discussion group, CFIs posted looking for shortcuts, rather than ways to provide effective, thorough instruction. Many showed a complete lack of initiative to research the answer to a question. These CFIs appear not to have a strong incentive to learn material at a deeper level or invest in further development. There are a number of factors that could result in this lack of motivation. For example, instructors who have career goals beyond instructing may feel that the job is temporary.

Researchers

William Jeffrey “Jeff” Edwards served in the United States Navy as bombardier/ navigator flying A-6 Intruders. His Ph.D. is in Aviation from Saint Louis University, concentrating in aviation safety. Jeff’s last tour of military active duty was as an aircraft accident investigator with the U.S. Naval Safety Center where he investigated Navy and Marine Corps aircraft accidents around the world. He later served as an aircraft accident investigator for McDonnell Douglas Aerospace and Boeing. He is a former corporate pilot and holds an ATP certificate, a commercial single engine land and sea, and glider certificates, and CFII, MEI and AGI certificates with nearly 10,000 hours total time. He has been a flight instructor since 1982 and is a former FAA designated pilot examiner. He is a Master Certificated Flight Instructor Emeritus, a six time designated Master Certificated Flight Instructor and the 2003 FAA National Flight Instructor of the Year. Jeff is a founder and current President of the Lancair Owners and Builders Organization, an international type club for Lancair fliers.

Ashley Awwad is a Program Analyst for the Federal Aviation Administration’s (FAA) Civil Aerospace Medical Institute (CAMI) in the Flight Deck Human Factors Division. She is a general aviation pilot with multiple certificates and ratings including a commercial certificate with instrument and multi-engine ratings. Ashley worked professionally as a certified flight instructor (CFI) early in her career. She also has degrees in Aerospace Science and Human Factors for Aviation Systems.

Thomas P. Turner holds an ATP with CFI, CFII and MEI, and a Master’s Degree in Aviation Safety. A prolific author and aviation educator, Tom is Executive Director of the American Bonanza Society Air Safety Foundation and President of Mastery Flight Training, where he writes the free *FLYING LESSONS Weekly* blog. He was the 2008 FAA Central Region Flight Instructor of the Year and 2010 National FAA Safety Team Representative of the Year, in 2015 Tom was inducted into the Flight Instructor Hall of Fame.

Justin Kunz is an ATP rated captain for Compass Airlines flying ERJ-170/175s. He is also a CFI/CFII. He has a BA in Business Economics from Benedictine University and also has an AS in Aviation Flight from Southern Illinois University Carbondale.

Doug Stewart is a CFI and CFII and is the owner of Doug Stewart Flight Instruction, Inc. He is the FAA National Certificated Flight Instructor of the Year for 2004. Doug is an eight-time Master Certified Flight Instructor, Gold Seal Instructor, and Designated Pilot Examiner. As a founding and charter member, Doug is also deeply involved with the [Society of Aviation and Flight Educators \(SAFE\)](#). Doug has logged over 11,000 hours of dual instruction given, with over 5,000 hours of that being instrument instruction.

Mark Sletten has worked as an aviation professional for nearly 40 years. Starting with a 20-year career as a USAF Boom Operator, his work in the aviation industry includes aircrew training, flight simulation, technical documentation, aviation journalism, and extensive volunteer work with the Lancair Owners and Builders Organization. He holds a Bachelor of Science in Workforce Education and Development from Southern IL University, and a private pilot certificate with an instrument rating.

Paul Pillar is a senior/lead flight test engineer for large Boeing legacy military platforms in Oklahoma City and also supports KC-46 efforts. At Boeing, he's worked as a system safety engineer (space and launch vehicles), systems engineer (C-17 WST), human factors lead for Future Combat Systems (UAS IPT), lead flight test engineer/test conductor for the KC-46 tanker, lead test conductor for the Phantom Eye UAS, an air safety investigator and supported the NTSB investigation of the Asiana 777 mishap. He is retired from the USAF, where he was a boom operator on KC-135s and KC-10s, including nuclear alert, instructor and evaluator, flight test at Edwards Air Force Base, inspector general and senior headquarters evaluator duties. Paul has bachelor and master degrees from Embry-Riddle Aeronautical University. He is currently pursuing a PhD from Saint Louis University, where his research interest revolves around human error production, identification, and mitigation with respect to large, tightly coupled flight test teams.

Appendix 1

• Taildragger Pilots United	• I Fly St. Louis
• Flying Friends	• The Aviator's Lounge
• Flights Above the Pacific Northwest	• Piper Arrow (PA-28R) & Piper Cherokee (PA-28) Owners, Pilots & Enthusiasts
• Private Pilots Club	• Pilot Social Network
• Central Oklahoma Aviators	• iPad Aviators
• Pilot Training Club	• FAA Certified Remote Pilots (Verified)
• Friends Going to Oshkosh	• Aero Tales
• Sh*t Pilots Read	• Aviation Enthusiasts
• Cessna Pilots	• FAA Part 107 Licensed Pilots
• Aviation Mentorship	• Missouri Pilots Association South Central Chapter
• Families in General Aviation	• Instrument Flying and Currency
• Student Pilots & Flight Instructors	• Flying Low and Slow to Oshkosh
• Aviation Addicts Anonymous	• AOPA Flying Club Network
• Pilots and Aviation Enthusiasts	• Aviators
• Oklahoma Pilot's Hangar	• Missouri Pilot's Association
• Hangar Talk	• Experimental Aircraft and Homebuilders
• CFI Academy	• Banned AOPA Members
• AOPA and EAA Members Unite	• Seaplanes and Flying Boats
• Cessna 17s Pilots	• Flights Above the Mid Central States - FATMCS
• Ladies Love Taildraggers	• FAASTeam UAS Discussion Group

<ul style="list-style-type: none"> • Cessna 170 	<ul style="list-style-type: none"> • Velocity Builders and Pilots
<ul style="list-style-type: none"> • Cessna 150/152 Club 	<ul style="list-style-type: none"> • Cessna Lovers
<ul style="list-style-type: none"> • Oklahoma Pilots Association 	<ul style="list-style-type: none"> •

Question from editor: What social media groups are the biggest offenders or non-conformists?

Answer:

- Taildragger Pilots United
 - Generally, sound advice but often some very poor attitudes and advice, especially with regard to buzzing and waterskiing. Also the attitude that tailwheel pilots are "better" than tricycle gear pilots; some in jest, but some take it much further.
- I Fly St. Louis
 - Great example of the silent CFI effect. There are numerous CFIs on this page that never provide corrections or opinions. There are also younger CFIs who provide misinformation. Generally, I believe that some of the members who have grown up in an aviation family sometimes acquire bad attitudes, as if they know more than others.
- Flying Friends
 - Fairly neutral, but can swing either way. Generally supportive.
- The Aviator's Lounge
 - The worst offender and also one of the larger groups. Downright harassment, bad attitudes, bad information, derision, sarcasm, ridicule.
- Flights Above the Pacific Northwest
 - Generally good but with a few bad actors.
- Piper Arrow (PA-28R) & Piper Cherokee (PA-28) Owners, Pilots & Enthusiasts
 - Generally good and supportive model forum, but with a few bad actors.
- Private Pilots Club
 - Insufficient data
- Pilot Social Network
 - Insufficient data
- Central Oklahoma Aviators
 - Generally supportive

- iPad Aviators
 - Neutral
- Pilot Training Club
 - Insufficient data
- FAA Certified Remote Pilots (Verified)
 - Generally supportive and good information
- Friends Going to Oshkosh
 - Generally supportive and good information
- Aero Tales
 - Insufficient data
- Sh*t Pilots Read
 - Pure humor site; little redeeming value
- Aviation Enthusiasts
 - Insufficient data
- Cessna Pilots
 - Generally good and supportive model forum, but with a few bad actors.
- FAA Part 107 Licensed Pilots
 - Generally good and supportive model forum, but with a few bad actors.
- Aviation Mentorship
 - Insufficient data
- Missouri Pilots Association South Central Chapter
 - Insufficient data
- Families in General Aviation
 - Generally supportive and family-oriented
- Instrument Flying and Currency
 - Generally good and supportive model forum, but with a few bad actors.
- Student Pilots & Flight Instructors
 - Generally good and supportive model forum, but with a few bad actors. Lots of misinformation and poor information.
- Flying Low and Slow to Oshkosh
 - Generally supportive

- Aviation Addicts Anonymous
 - Insufficient data
- AOPA Flying Club Network
 - Insufficient data
- Pilots and Aviation Enthusiasts
 - Insufficient data
- Aviators
 - Insufficient data
- Oklahoma Pilot's Hangar
 - Generally supportive
- Missouri Pilot's Association
 - Generally supportive
- Hangar Talk
 - Insufficient data
- Experimental Aircraft and Homebuilders
 - Insufficient data
- CFI Academy
 - Generally good and supportive model forum, but with a few bad actors.
Misinformation and poor information.
- Banned AOPA Members
 - Worthless and one of the worst sites.
- AOPA and EAA Members Unite
 - Insufficient data
- Seaplanes and Flying Boats
 - Insufficient data
- Cessna 170s Pilots
 - Generally good and supportive model forum
- Flights Above the Mid Central States - FATMCS
 - Insufficient data
- Ladies Love Taildraggers

- Generally good and supportive model forum; female fellowship and development oriented
- FAASTeam UAS Discussion Group
 - Great!
- Cessna 170
- Velocity Builders and Pilots
 - Generally good and supportive model forum
- Cessna 150/152 Club
 - Generally good and supportive model forum, but with a few bad actors. Misinformation and poor information.
- Cessna Lovers
 - Insufficient data
- Oklahoma Pilots Association
 - Social-orientation. Generally good and supportive forum.

Appendix 2

<ul style="list-style-type: none">• American Bonanza Society
<ul style="list-style-type: none">• Aviators
<ul style="list-style-type: none">• Beechcraft Bonanza Owners, Pilots and Enthusiasts
<ul style="list-style-type: none">• BPPP CFIs and Students
<ul style="list-style-type: none">• CFI Academy
<ul style="list-style-type: none">• CFI Discussion Group
<ul style="list-style-type: none">• Greg Brown's Student Pilot Pep Talk
<ul style="list-style-type: none">• Mastery Flight Training
<ul style="list-style-type: none">• National Association of Flight Instructors
<ul style="list-style-type: none">• Platinum Cirrus Instructors
<ul style="list-style-type: none">• Society of Aviation and Flight Educators
<ul style="list-style-type: none">• Textron Aviation Employees Flying Club