WEIGHT-SHIFT AVIATORS MODEL CODE OF CONDUCT

Recommended voluntary practices to advance flight safety, airmanship, and the weight-shift aircraft community

Provided to the aviation community by:

Precision Windsports, Inc.
Lynchburg, VA (KLYH)

INTRODUCTION

The WEIGHT-SHIFT AVIATORS MODEL CODE OF CONDUCT (Code of Conduct) offers recommendations for ***all pilots who fly weight-shift aircraft, regardless of their ratings and privileges***. It seeks to advance flight safety, airmanship, and the weight-shift aircraft community.

The Code of Conduct presents a vision of excellence in weight-shift aviation. Its principles both complement and supplement legal requirements. The Code of Conduct is not a standard, and is not intended to be implemented as such.

The Code of Conduct consists of seven sections, each containing Principles and Sample Recommended Practices:

The Principles

    I.   GENERAL RESPONSIBILITIES OF AVIATORS
   II.   PASSENGERS AND PEOPLE ON THE SURFACE
 III.   TRAINING AND PROFICIENCY
 IV.   SECURITY
  V.   ENVIRONMENTAL ISSUES
 VI.   USE OF TECHNOLOGY
VII.   ADVANCEMENT AND PROMOTION OF GA

The Sample Recommended Practices

Each *Sample Recommended Practice* offers suggestions for how pilots may integrate the Code of Conduct principles, such as adopting *personal minimums*, and helping weight-shift aircraft pilots, aviation communities, and organizations develop practices uniquely suited to their own activities and situations. Unlike the Code of Conduct principles themselves, **the Sample Recommended Practices may be modified to satisfy the unique capabilities and requirements of each pilot, mission, aircraft, and GA organization**. Some Sample Recommended Practices exceed the stringency of their associated Code of Conduct principles. They are not presented in any particular order.

Note: Not all flight operations are authorized in all jurisdictions. References to the United States FAA are used as examples. Where other government entities are controlling, applicable laws and regulations must be followed.

Benefits of the Code of Conduct

The Code of Conduct benefits pilots and the weight-shift aircraft community by:

- highlighting important practices that make pilots better, safer aviators,

- promoting improved pilot training, better airmanship, appropriate pilot conduct, personal responsibility, and pilot contributions to the GA community and society at large,

- encouraging the development and adoption of ethical guidelines,

- advancing self-regulation through the weight-shift aircraft community as an alternative to government regulation, and

- promoting weight-shift aircraft and aviation, and making flying a more rewarding experience.

**

WEIGHT-SHIFT AVIATORS MODEL CODE OF CONDUCT - PRINCIPLES

I. GENERAL RESPONSIBILITIES OF AVIATORS

Pilots should:

a. make safety their number one priority,

b. seek excellence in airmanship,

c. develop and exercise good judgment,

d. recognize and manage risks effectively,

e. adhere to prudent operating practices and personal operating parameters (*e.g., minimums*),

f. aspire to professionalism,

g. act with responsibility and courtesy, and

h. adhere to applicable laws and regulations.

Explanation: Code of Conduct Section I serves as a preamble to the Code of Conduct's other principles. It emphasizes safety, excellence, risk management, and responsibility, and lays the foundation for accountability and heightened diligence.

Sample Recommended Practices

- Approach flying with the utmost seriousness and diligence, recognizing that your life and the lives of others depend on you.

- Recognize, accept, and plan for the costs of implementing proper safety practices. Such costs are often greater than expected.

- Identify and adapt to changing flight conditions based on sound principles of airmanship and risk management. Be willing and able to alter or terminate your flight plan when conditions fall below your personal minimums.

- Recognize the increased risks associated with flying in inclement weather, at night, over water, or over rugged, mountainous, or forested terrain. Manage such risks prudently, without exceeding personal parameters (*see* Code of Conduct I.e.).

- Develop, use, periodically review, and refine personal checklists and personal minimums for all phases of flight. Review these materials regularly with a flight instructor or other trusted mentor.

- Make personal wellness a precondition of flight (for example, by using the *I'M SAFE* checklist). Make an honest self-evaluation of your aeromedical fitness before each flight. Consider undergoing periodic

voluntary medical examinations to confirm your fitness.

- ❑ Know your personal susceptibility to hypoxia, and establish O_2 personal parameters—for example, daytime above 8,000 ft. MSL and nighttime above 5,000 ft. MSL. Carry supplemental oxygen on flights where its use may benefit you or your passengers.

- ❑ Examine yourself; identify hazardous attitudes, and think about antidotes.

- ❑ See and be seen. Employ techniques for seeing and avoiding other aircraft. Scan for traffic continuously. Enhance your visibility and awareness of other aircraft through appropriate use of lights.

- ❑ Listen and be heard. Monitor applicable frequencies to remain aware of the location of other aircraft, and inform other pilots of your position and intentions.

- ❑ Comply with or exceed the requirements for mandatory inspections, Safety Directives (SDs), Airworthiness Directives (ADs), and Manufacturers Continued Airworthiness Instructions, as appropriate. Adhere to manufacturer-recommended inspections, service bulletins, and checklists.

- ❑ Maintain sufficient altitude to provide suitable landing options in the event of an emergency.

- ❑ Evaluate the weather before each flight, using all available appropriate aviation resources.

- ❑ Conduct a thorough cross country preflight, including diversion alternatives. Consider the effects of wind on fuel reserves and range. Remember that wind has a pronounced effect on the ground speed of weight-shift aircraft.

- ❑ Develop a good understanding of effective decision-making.

- ❑ Adhere to applicable rules and operating practices of your flying club or school, your FBO, flight center, or aircraft rental provider.

- ❑ Seek advice from experienced pilots and flight instructors.

- ❑ Adhere to traffic pattern procedures:
  - Use appropriate publications to identify any published traffic pattern and operations.
  - Work with controllers and other pilots to harmonize flight operations and patterns.
  - Determine whether operating an "inside" pattern (if authorized) may improve traffic pattern safety and efficiency.
  - Exercise extreme caution when flying at unfamiliar airfields.

- ❑ File a flight plan or communicate your intended flight itinerary to a person on the ground prior to departure, even when flying locally.

- ❑ Develop and adhere to conservative operating parameters, such as the following personal minimums:
  - *Departures* - select a departure alternate landing site for emergency landing just after takeoff.
  - *Maneuvering* - minimize turns and maneuvers below a predetermined safe altitude except as required for takeoff, landing, or obstacle clearance.
  - *Landing* - be aware of any adverse conditions such as crosswinds. If uncertain of landing conditions, consider making a low pass to evaluate runway conditions before landing or diverting.
  - *Emergency landing sites* - whenever practicable, fly within range of a suitable emergency landing site.
  - *Night operations* - recognize the increased risks associated with night flight.

II. PASSENGERS AND PEOPLE ON THE SURFACE

Pilots should:

a. maintain passenger safety first and then reasonable passenger comfort,

b. manage risks and avoid unnecessary risks to passengers and to people and property on the surface and in other aircraft,

c. brief passengers on planned flight procedures, including any significant or unusual risks associated with the flight,

d. seek to prevent unsafe conduct by passengers, and

e. avoid operations that may alarm or annoy passengers or people on the surface.

Explanation: You are solely responsible for the safety and comfort of your passengers. Passengers place their lives in pilots' hands, and pilots should exercise sufficient care on their behalf. Such care includes, but is not limited to, disclosing unusual risks, and exercising prudent risk management. Pilot responsibility also extends to people on the ground and in other aircraft. By definition, a weight-shift aircraft may carry only one passenger.

Sample Recommended Practices

❑ Keep your passengers as safe as possible—*as though they were your closest loved ones*.

❑ Aspire to treat your passengers with professionalism.

❑ Plan and fly conservatively to improve safety margins.

❑ Tactfully disclose risks to each passenger and accept a prospective passenger's decision to refrain from participating.

❑ Consider the use of hearing protection. In an open cockpit, consider the use of helmet and eye protection.

❑ Provide a thorough passenger briefing prior to flight.

❑ Determine the experience, background, and concerns of each passenger. Incorporate them into the preflight briefing and flight activities.

❑ If feasible, consider obtaining adequate insurance coverage for passengers, and urge passengers to do so as well.

❑ Instruct passengers to avoid touching or obstructing critical flight controls.

❑ Encourage passengers to serve as safety resources – for example, by having them identify nearby aircraft, organize charts, and keep track of landmarks.

❑ Screen unfamiliar passengers for safety and security risks.

III. TRAINING AND PROFICIENCY

Pilots should:

a. participate in training to maintain and improve proficiency beyond minimum legal requirements,

b. participate in flight safety education programs,

c. act with vigilance and avoid complacency,

d. train to recognize and deal effectively with emergencies, and

e. accurately log hours flown and maneuvers practiced to satisfy training and currency requirements.

Explanation: Training and proficiency underlie aviation safety. Recurrent training is a major component of flight safety. Such training includes both air and ground training. Each contributes significantly to flight safety and neither can substitute for the other. Training sufficient to promote flight safety may well exceed what is required by law.

Sample Recommended Practices

- Pursue a rigorous, life-long course of aviation study.

- Use the manufacturer's flight manual to determine your aircraft's performance and limitations, plan flights, properly secure cargo, determine fuel requirements and calculate weight and balance.

- Follow and periodically review programs of study or training exercises to improve proficiency. Adhere to a training plan that will yield new ratings, certificates, and endorsements—or at the very least, greater flight proficiency.

- Complete scenario-based training to supplement stick-and-rudder training with decision making and risk management skills.

- Train for flight in unique environments such as over water or over remote, desert, or mountainous terrain. Train for survival, and carry adequate survival equipment and drinking water.

- Understand and use appropriate procedures in the event radio communications are lost.

- Achieve and maintain proficiency in the operation of technology-intensive aviation equipment.

- Know current aviation regulations and understand their practical application and rationale.

- Spend time each month reviewing the aviation regulations and the Aeronautical Information Manual.

- Understand and comply with the privileges and limitations of your pilot certificate.

- Attend aviation training programs offered by industry organizations or the FAA.

- Participate in the FAA Pilot Proficiency Program (WINGS).

- Seek out and study diverse and relevant aviation publications.

- Study aviation weather, and develop a systematic approach to obtaining and evaluating aviation briefings and flight conditions.

- Conduct a monthly review of recent or nearby accidents and incidents, focusing on probable causes.

- Periodically demonstrate conformance to applicable practical test standards (PTS), and train to exceed minimum standards.

- Obtain adequate training before flying an unfamiliar aircraft, even if you have flown that type in the past.

- Avoid practicing maneuvers near congested areas.

- Seek to fly at least once every two weeks, including at least three takeoffs and landings.

- Develop a practical understanding of the mechanical systems of each aircraft you fly.

- Join a type club or support organization for the aircraft you fly to learn more about its operating limitations and performance capabilities.

- Complete the equivalent of a Flight Review annually rather than every two years.

- Maintain currency that exceeds minimum regulatory requirements.

- Register at <http://www.faasafety.gov> to receive announcements of safety meetings and literature, and to review appropriate safety courses online.

IV. SECURITY

Pilots should:

a. seek to maintain the security of all persons and property associated with their aviation activities,

b. remain vigilant and immediately report suspicious, reckless or illegal activities,

c. secure their aircraft to prevent unauthorized use, and

d. avoid special-use airspace except when approved or necessary in an emergency.

Explanation: This section addresses preventing criminal acts and promoting national security. The tragic events of 9/11 have had a profound impact on aviation, demanding responsive action. Enhanced security awareness by aviators is a stark new reality for the GA community.

Sample Recommended Practices

❑ Check NOTAMS thoroughly during preflight preparation, and obtain updates during long flights, including NOTAMS for temporary flight restrictions (TFRs).

❑ Use a transponder with altitude encoding if equipped and operable unless otherwise authorized by ATC.

❑ Use additional or enhanced locks or other anti-theft devices to secure all aircraft.

❑ When carrying a passenger who is not well known to you, examine passenger carry-on bags for hazardous materials and weapons.

❑ Confirm that airport ramp access gates are closed securely behind you to prevent access by unauthorized persons.

❑ Become familiar with *Airport Watch* (+1-866-GA-SECURE) and other means to report and deter suspicious activities.

❑ Report security concerns, flight safety hazards or anomalies such as inoperative VORs or poor radio coverage to the appropriate authorities.

❑ Use FAA radar advisories (in Europe, "Flight Information Service") when flying VFR whenever practicable.

❑ Avoid deviating from an active flight plan or from a clearance without notifying ATC.

V. ENVIRONMENTAL ISSUES

Pilots should:

a. recognize and seek to mitigate the environmental impact of aircraft operations,

b. minimize the discharge of fuel, oil, and other chemicals into the environment, particularly during refueling, preflight preparations, and servicing,

c. avoid environmentally sensitive areas, and

d. mitigate aircraft noise in populated or other noise-sensitive areas, and comply with applicable noise-abatement procedures.

Explanation: Mitigation of pollution caused by aviation activities is important both to the general public, to minimize harm to the environment, and to the aviation community, to avoid unfavorable public perceptions. Indeed, environmental issues including noise pollution can lead to the closing of airports and can otherwise jeopardize aviation.

Sample Recommended Practices

❑ Use a Gasoline Analysis Test Separator (GATS) jar or other environmentally sound device/procedure for all fuel sampling and return fuel samples to the fuel tanks or dispose of them properly.

❑ Learn and adopt environmentally responsible methods for all aspects of aircraft care, especially degreasing aircraft and handling run-off.

❑ Learn relevant applicable local noise abatement procedures and adhere to them whenever it is safe to do so.

❑ If practicable, fly well above noise-sensitive areas, or seek to avoid them altogether.

❑ If practicable, install noise-reducing equipment such as quieter props and exhaust systems.

❑ Be aware of the noise signature of your aircraft, and follow procedures to reduce noise, such as reducing engine power as soon as practicable after takeoff.

❑ Conform to recommended practices (such as those of the National Park Service) when flying near wilderness and environmentally sensitive areas.

❑ Consider the impact of aircraft on wildlife and people on the surface.

❑ Patronize service providers (such as FBOs, repair services and aircraft cleaners) that adhere to environmentally friendly practices.

❑ Become familiar with hazardous material ("HazMat") dangers, requirements, and practices.

████████████████████████████

VI. USE OF TECHNOLOGY

Pilots should:

a. become familiar with and properly use appropriate available cost-effective technologies,

b. monitor applicable airport advisory frequencies and report position when approaching airports without an operating control tower and other higher-risk areas if radio-equipped,

c. use transponders or other position-indicating technologies during in-flight operations if available, or otherwise directed by ATC, and use ATC "flight following" for VFR enroute operations, and

d. if practicable, carry redundant transceivers and navigational equipment and use them in appropriate circumstances.

Explanation: Innovative, compact, inexpensive technologies have greatly expanded the capabilities of GA aircraft. This section encourages the use of such safety-enhancing technologies.

Sample Recommended Practices

❑ When practicable, invest in new technologies that advance flight safety, and train to use them properly. Learn and understand the features and limitations of such technologies.

❑ Consider installing a ballistic parachute and enhanced occupant restraints.

❑ Maintain and inspect avionics and flight instruments to keep them operational, current, and approved for the intended flight.

❑ Recognize that programming avionics in flight may cause distractions and increase programming errors.

❑ Avoid programming navigation systems while taxiing.

❑ Maintain basic flight proficiencies to enhance safety in the event of the failure or absence of advanced technologies and services.

████████████████████████████

VII. ADVANCEMENT AND PROMOTION OF GENERAL AVIATION

Pilots should:

a. **advance and promote general aviation, safety, and adherence to the Code of Conduct,**

b. **volunteer in and contribute to organizations that promote general aviation, and use their aviation skills to contribute to society at large,**

c. **demonstrate appreciation for aviation service providers,**

d. **advance a general aviation culture that values openness, humility, positive attitudes, and the pursuit of personal improvement, and**

e. **promote ethical behavior within the GA community.**

Explanation: General aviation has a well-recognized, undeserved, and worsening public relations problem. Vigilance and responsive action by the GA community are essential to ensure GA vitality and to enhance the GA experience for pilots and passengers.

Sample Recommended Practices

❑ Strive to conform fully to this Code of Conduct.

❑ Serve as a *GA ambassador* to the public by providing accurate information and refuting misinformation concerning GA activities, and by encouraging potential student pilots.

❑ Volunteer in support of general aviation.

❑ Make charitable use of your aviation resources (for example, by transporting persons seeking medical care or donating flight time to youth and environmental programs).

❑ Express appreciation to controllers and service personnel for their assistance and good service.

❑ Participate in aviation-related fund raising events.

❑ Invite constructive criticism from your fellow aviators and provide the same when asked.

❑ Adhere to the highest ethical principles in all aviation dealings, including business practices.

❑ Seek to resolve disputes informally and congenially.

ADDITIONAL RESOURCES

❑ The LIGHT SPORT AVIATORS MODEL CODE OF CONDUCT, the AVIATORS MODEL CODE OF CONDUCT, the SEAPLANE PILOTS MODEL CODE OF CONDUCT, and the STUDENT PILOTS MODEL CODE OF CONDUCT are available at <www.secureav.com>.

❑ Resources to help weight-shift aircraft pilots advance pilot skills and promote flight safety are available at <http://precisionwindsports.com/>.

❑ Further information about Sport Pilot and Light-Sport Aircraft is available at:

FAA:
<www.faa.gov> (search *light sport*)

AOPA:
<www.aopa.org/sportpilot>

EAA:

SecureAv:
<www.secureav.com>

USUA:

❑ *Annotated Commentary* helps aviators interpret the Code of Conduct and provides source materials and supplemental aides. Available at <www.secureav.com/Commentary-Index.pdf>.

Abbreviations	
AD	Airworthiness Directive
AGL	Above Ground Level
ATC	Air Traffic Control
FAA	Federal Aviation Administration
FBO	Fixed Base Operator
GA	General Aviation
IFR	Instrument Flight Rules
MSL	Mean Sea Level
PTS	Practical Test Standards
SD	Safety Directive
TFR	Temporary Flight Restrictions
VFR	Visual Flight Rules

EDITS, ERRATA, COMMENTS

The Code of Conduct is a living document, intended to be updated periodically to reflect changes in aviation practices and the aviation environment. Please send your suggestions, edits, errata, questions and comments to the Permanent Editorial Board at <PEB@secureav.com>.

***