THE SOCIETY OF EXPERIMENTAL TEST PILOTS
CODE OF PROFESSIONAL ETHICS

SETP BOARD OF DIRECTORS
21 February 2020

**All members of SETP will strive to perfect
professional integrity, excellence, and accountability.**

Integrity

- Hold paramount the safety, health, and welfare of the end-user, passenger, and public.
- Deliver accurate results and objective conclusions.
- Reject bribery, fraud, and corruption in all forms, including conflicts of interest.
- Properly credit the contributions of others.
- Treat all persons fairly, based solely upon their words and deeds.

Excellence

- Advocate for safety in the balance of flight test program risks.
- Seek, accept, and offer honest criticism.
- Incorporate lessons-learned into future practice, and share them when appropriate.
- Steadfastly seek—and willingly provide—education and mentorship.

Accountability

- Consider aptitude and proficiency before accepting tasks.
- Ensure sound test pilot opinion is provided where relevant.
- Acknowledge and constructively address errors.

<u>Objective</u>

The objective of the SETP Code of Professional Ethics is to educate and guide SETP members on the ethical professional conduct necessary to meet what the SETP Constitution calls "the moral obligation of the test pilot."

Developmental test and evaluation of an aerospace system occupies the difficult ground between the motivations and constraints of business and the ethical obligations of the flight test professional. Test pilots enter this environment with a very unique perspective, coming from the diverse science and engineering practices of aviation and the rarified skills of the operational aviator. To meet their professional moral obligation, test pilots must effectively apply their unique perspective and skills during the development of aerospace systems.

It is human nature to treat one's intuitive understanding of ethics as manifest and irrefutable, in spite of the plain evidence that our sense of ethics is heavily influenced by upbringing, environment, and education. Entering the environment of flight test demands education on the ethics of the profession, or at least the reiteration of those ethical principles tested most directly by the challenges of flight test. The SETP Code of Professional Ethics seeks to capture the ethics lessons repeatedly learned by flight test professionals.

<u>Discussion</u>

Integrity

- **Hold paramount the safety, health, and welfare of the end-user, passenger, and public.**
  The work of a test pilot centers upon the development of aerospace systems intended for a greater purpose, beyond personal edification. While there may be personal risk required to accomplish this work, its primary purpose is to reduce the risk to others. From the safety of passengers on commercial aircraft or crewmembers on combat aircraft, to the effectiveness of a combat system and the unnecessary hazards it might present to non-combatants, test pilots are intuitively aware that their work demands placing the safety of the public and end-user above their own.

- **Deliver accurate results and objective conclusions.**
  Valid flight test is essential for the research and development of aerospace systems. Nature is deaf to our hopes and predictions. Given that perfect accuracy is impossible, results should be presented with an accurate representation of their precision. Conclusions must be objectively based upon the results to minimize the influence of preconceived notions. Only accurate results and objective conclusions can be trusted to create recommendations that will ensure flight test efforts will have their necessary impact.

- **Reject bribery, fraud, and corruption in all forms, including conflicts of interest.**
  Corruption puts personal gain above honor, ethics, and mission. It amounts to intentionally presenting false information and willfully endangering the safety, health, and welfare of the end-user, passenger, and public.

- **Properly credit the contributions of others.**
  Failure to give credit where due is a form of theft. More subtly, it can provide a façade of expertise, leading others to overestimate the expertise of the thief and give the thief's word undue trust. On the other hand, crediting the work of others creates an environment where test pilots can leverage the trust that they have truly earned.

- **Treat all persons fairly, based solely upon their words and deeds.**
  We are all capable of succumbing to prejudice and allowing inconsequential differences to hide valuable contributions. Prejudice shrinks the world and narrows one's vision. This also applies in the cockpit and flight test environment, where there is no room for dismissing reasonable opinions out-of-hand based solely on the station of the source.

Excellence

- **Advocate for safety in the balance of flight test program risks.**
  Test pilots are often the most important voice for test safety when the inevitable and difficult decisions balancing cost, schedule, and safety risk must be made. A test pilot's vigorous and appropriate advocacy

for test safety can prevent an imbalance in risk that will trade reduced cost and schedule risk with unacceptable hazards for the test team, the development program, the end-user, and the public.

- **Seek, accept, and offer honest criticism.**
Test pilots are surrounded by potential mentors because the complexity of the flight-test environment means that everyone on the test team exclusively holds important knowledge or perspective. Accepting and genuinely considering criticism is a powerful means of self-improvement, and respectfully providing constructive criticism provides colleagues with those same means.

- **Incorporate lessons-learned into future practice, and share them when appropriate.**
Test pilots succeed in large part thanks to the lessons-learned of those that have gone before; lessons that have been incorporated into requirements, standards, manuals, guides, and so on. When a lesson is learned, a professional test pilot will pass it on in an appropriate and effective manner, not leaving to word-of-mouth those lessons that can be incorporated into appropriate standards of practice.

- **Steadfastly seek—and willingly provide—education and mentorship.**
The aerospace industry advances at such a pace that test techniques can quickly become outdated, inadequate, or irrelevant; as will any test pilot that is comfortable with their understanding of the art and science of flight test. Yesterday's techniques are a starting point for tomorrow's techniques and only education—either formal or through mentorship—can enable a test pilot to find or develop an appropriate test methodology.

Accountability

- **Consider aptitude and proficiency before accepting tasks.**
A test pilot must strive to enhance their competency, and improve or mitigate their limitations. A test pilot accepts only those tasks that they are—or will be—qualified to perform, just as they would only assign a task to an appropriately-qualified test pilot. If training is required and cannot be provided, and refusal is not an option, training must be imbedded in the build-up process.

- **Ensure sound test pilot opinion is provided where relevant.**
Early in the development process of an aerospace vehicle, the most important and most qualified advocate for the end-user may be the test pilot. Objective criteria cannot capture the subjective demands of a complex aerospace system, especially regarding the interface between the pilot and the vehicle. A test pilot must ensure that these subjective demands are acknowledged and correctly assessed. The opinion of the test pilot must be objective, balanced, and insulated from emotion.

- **Acknowledge and constructively address errors.**
A test pilot recognizes their fallibility and understands that an error needn't be shameful. The shame is in the hidden or unreported error that eats into the safety and effectiveness of the flight test process. Every error is an insight into aptitude and an opportunity for self-improvement.