

**Center of Excellence for Technical Training and Human Performance (TTHPP)**



**HF011 – PART 141 PILOT SCHOOL MODEL FEASIBILITY STUDY**

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July 30, 2018

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## Executive Summary

Every quarter approximately 440 Office of Aviation Safety (AVS) General Aviation Safety Inspectors (ASI) travel to the Flight Program Operations (AJF-11) facility at Fort Worth Alliance (AFW) Airport for currency/proficiency and training services. Ground school, training in simulators, and training in aircraft are administered by Federal Aviation Administration (FAA) employed Standardization Pilots (SP) and contracted Instructor Pilots (IP). IPs are trained by the FAA SPs and the Vendor's (contractor) lead pilots. This project explored the feasibility of Flight Program Operations providing the currency/proficiency and training services delivered at AFW under Title 14 of the Code of Federal Regulations (14 CFR) Part 141 model. Part 141 is a structured training paradigm that currently has oversight from the respective local Flight Standards District Office (FSDO).

A survey was sent to the five SPs employed at the Flight Program Operations, Aviation Safety Training Group, AJF-11. Three SPs completed the survey for a 60% response rate. The items in the survey were based on seven categories: Training, Professionalism, Equipment Availability, Delays and Cancellations, Punctuality, Scheduling Conflicts, and Efficiency. Professionalism received the most positive responses from the SPs. The SPs agreed that the IPs dressed professionally and interacted with the ASIs in a professional manner. Punctuality seemed to be a problem for the ASIs and the IPs. In addition, the SPs indicated issues with Equipment Availability, Scheduling Conflicts, and Delays and Cancellations. However, it could not be determined from the survey if Punctuality was the result of, or a contributing factor to the issues with Equipment Availability, Scheduling Conflicts, and Delays and Cancellations. The most concerning finding was that SPs reported that training and evaluation were not consistent across ASIs, and compliance with the ASI curricula was not always followed. Additionally, the SPs reported that the current ASI training program could be more efficient.

These results supported the impression of the research team's visit to AJF-11. One factor that may contribute to the concerns and issues of the SPs is the high turnover rate of the IPs, especially for the piston aircraft IPs. Another factor that may contribute to the concerns and issues is the less than structured (relative to a Part 141 curriculum) training of the IPs.

The research team conducted a literature review of the best training approaches for aviation students as well as the best currency instruction for pilots. Fundamentals of instruction, retention, and skill decay issues were reviewed. It was concluded that the main principles for ab initio training are shared commonality with currency training.

The research team explored the Part 141 options for IP training, as well as the currency/proficiency and training services delivered at AFW. It was determined that there would be several benefits to implementing a Part 141 option for Flight Program Operations. First, a Part 141 program would institute a standardization of training by the corresponding Part 141 regulation. Second, a Part 141 program would allow Flight Standards (FS) to focus on oversight

of the execution of the program thereby, leaving the training to Flight Program Operations and its Vendor. Third, maintenance of the fleet would be standardized and customized for the needs of the AVS participants in the FAA Flight Program.

The research team recommends that currency/proficiency and training services for AVS participants in the FAA Flight Program be conducted by an entity that has a Part 141-K (Special Operations) issued certificate, which will provide more standardization in delivery of training and greater oversight by the FAA. A prospective vendor can apply for a Part 141-K program as the sole program or a prospective vendor can apply for a Part 141-K program in addition to other Part 141 programs. Establishing a Part 141-K program may solve many of the potential issues reported by the SPs. Finally, a Part 141-K certificate will shift oversight entirely to the vendor/pilot school's jurisdictional FSDO, thereby allowing more concentration on the delivery of currency/proficiency and training services by AJF-11.

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## Chapter 1: Introduction

Following consolidation of the legacy agency flight programs, the Federal Aviation Administration (FAA), Air Traffic Organization (ATO), Flight Program Operations organization is responsible for all aspects of the FAA Flight Program to include safety, policy/standards, operations, training, maintenance, administrative services, financial and business management, acquisition, reporting, regulatory compliance, and other internal/external requirements. Flight Program Operations conducts multiple missions in FAA aircraft (owned, leased, rented, unmanned aircraft systems, etc.).

The Flight Program Operations core business is safe flight operations and efficient execution of its four primary missions: aviation safety training; flight inspection; research, development, test and evaluation (RDT&E) support; and critical event response/transportation.

The Aviation Safety Training Group (AJF-11) is responsible for conducting the aviation safety training mission and providing currency/proficiency and training services to Office of Aviation Safety AVS personnel, including Flight Standards Service (AFS) Aviation Safety Inspectors (ASI) and Aircraft Certification Service (AIR) flight test personnel. These ASIs and flight test personnel require training to remain qualified and current to operate FAA aircraft, in order to perform their primary job duties in a proponent/applicant aircraft. Flight Program Operations personnel, including contract flight instructors assigned to the Aviation Safety Training mission are based at Fort Worth Alliance Airport (AFW). Nine FAA-owned King Air C90GTi aircraft and a fleet of leased aircraft (provided by the Vendor) based at the AFW Service Center support this mission, as well as rental of aircraft across the country as needed.

ASIs administer, investigate, and enforce safety regulations and standards for the production, operation, maintenance, and modification of all aircraft. ASIs also conduct oversight, surveillance inspections, and recertification of all Part 141 flight schools. ASIs also may conduct re-examination 709 flights (CFR 49, USC 44709) and flights where waivers are issued. General Aviation ASIs perform their primary job functions in proponent aircraft, to include single and twin-engine piston airplanes, turboprop airplanes, and rotorcraft. These participants in the FAA Flight Program require services from Flight Program Operations in order to remain qualified and current to conduct pilot evaluating, testing, and checking (certification) functions in proponent aircraft.

To maintain required pilot currency and proficiency, approximately 440 General Aviation ASIs travel to the Flight Program Operations facility located at Fort Worth Alliance Airport (AFW) each quarter. The quarterly currency/proficiency requirements are scheduled for 1 to 5 days depending on the ASIs specific assignment(s), and most ASIs arrive the evening before. During the currency/proficiency events, an ASI flies with an instructor pilot (IP), designated as Pilot in Command. The IPs conduct these flights in single and twin-engine piston airplanes (leased), turboprop airplanes (government-owned), and rotorcraft (leased). On occasions, such as when

there may not be enough IPs available, FAA-employed standardization pilots (SP) fly with the ASIs during the currency/proficiency and training flights. Currently, IPs are contract pilots trained by the FAA SPs and occasionally the Vendor lead pilots. The Flight Program Operations Supplemental Training Program is designed to ensure that the IPs remain adequately trained for each aircraft and duty position. IP currency/proficiency and required annual training is conducted by the FAA SPs and vendor lead pilots, based at AFW.

On a quarterly basis, each ASI receives approximately 1 week of currency/proficiency services and/or flight training, as well as ground training. During a typical week, the ASI receives classroom instruction, advanced aviation training device (AATD) instruction, and flights in aircraft. In the case of formal training courses, the curricula are provided to Flight Program Operations by Flight Standards (FS) each fiscal year. Classroom instruction is conducted by FAA standardization pilots and contract IPs. AATD instruction is conducted by both FAA SPs and contract IPs.

Under the current contract, specific requirements are required to serve as an IP. One concern the program is currently experiencing, is a high turnover rate of IPs, especially for the piston multi and single-engine land airplane. Another concern is that the current staffing levels of SPs hampers the ability to continue structured FAA oversight and training administered to the IPs.

This document explores the feasibility of administering currency/proficiency and training for ASIs, as well as the currency/proficiency and training services delivered to the IPs in single/multi-engine aircraft and rotorcraft under Title 14 of the Code of Regulations (14 CFR) Part 141 model. The current curricula provided to the ASIs (as delivered by IPs) were reviewed. In addition, surveys were sent to the SPs requesting their perception of the currency/proficiency and training services. The scope of this review includes currency/proficiency and training services delivered by the Vendor in leased single/multi-engine and rotorcraft platforms at AFW. A proposal will be presented detailing the benefits and challenges of modeling the aviation safety training mission (currency/proficiency and training services provided to AVS participants in the FAA Flight Program) under a series Part 141 curricula, followed by conclusions and recommendations.

## Chapter 2: Background Literature

Aviation instructors, as professionals, strive to perpetuate the highest level of knowledge, training, and currency in their field (FAA, 2008). Simulated and actual high-risk settings render a complex web of relationships among environmental stimuli, the pilot's response choices, and outcomes that follow each choice (Alavosius, Houmanfar, Anbro, Burleight, & Hebein, 2017). Training is usually limited to only what is necessary to allow a smooth and safe educational experience (Gray, 2009). The most important thing a pilot learns in training, aside from developing control to a level where flying the aircraft requires less attentive resources, is the art of appropriately shifting attention across the plethora of items that must be monitored and controlled (Gray, 2009).

With respect to training, authenticity is a term widely used. The origin of the idea of authenticity is rooted in Greek philosophy ("To thine own self be true" or "Know thyself"). Harter (2002) defines authenticity as being true to one's experiences, needs, thoughts, emotions, beliefs, and desires. Tasks should be authentic, the learning environment should be authentic, and above all, the teacher should be authentic (De Bruyckere, Kirschner, & Fai Hui, 2017). De Bruyckere et al.'s research showed there are four criteria that students in formal educational settings use when forming their perceptions of the instructor: Expertise, Passion, Unicity, and Distance. Unicity is the notion that no two individuals are the same— every instructor has different background and personality characteristics. Distance is explained as being two criteria: Proximity (being supportive of students within certain boundaries) and Strictness (focusing on a rigid teaching process).

Aviation instructors are authorities in their respective areas. It is vital that instructors know how to teach and how to project a knowledgeable and professional image to their students (FAA, 2008). Research on skill decay has shown refresher training can be critical (Salas, Tannenbaum, & Kraiger, 2012). Skill decay is the loss or decay of training, skills, or knowledge after a period of nonuse (Arthur, Bennett, Stanush, & McNelly, 1998). Arthur, Bennett, Stanush and McNelly's meta-analysis (1998) of skill decay research has shown that the day after training, trainees exhibit little to no skill decay; however, a year after the training, the loss of trained knowledge is over 90%. Skill decay is combated by currency training. When properly planned in advance with a specific goal set, currency training can be a pleasant experience, not a stressful one (Gebers, 1997). Flight instructors are the largest source of variability in the training of aircraft pilots (Roscoe, Jensen, & Gawron, 1980).

### *Handling Qualities*

Handling qualities can be defined as "qualities or characteristics of an aircraft that govern the ease and precision with which a pilot is able to perform the tasks required." "Handling quality can be affected by cockpit interface (e.g., displays, controls), the aircraft environment (e.g., weather conditions, visibility, turbulence), and stress (Cooper, 1969)." Thirty years ago, at the

United States Air Force (USAF) test pilot school, handling qualities testing was an afterthought. Pilots were limited to a few hours of classroom instruction— maybe two flights and a single flight maneuver (Gray, 2009). Twenty-five years ago, the USAF test pilot school began the process of academically analyzing its curriculum. Handling qualities testing currently encompasses several hours of instruction and simulation, three or more simulator sessions, and five dedicated demonstration and data sorties. The USAF's new training carries an appreciation for the complexity of the task. Test pilots and test engineers are now more aware of inner loops, and more thorough and scientific in their evaluations (Gray, 2009).

### *Fundamentals of Instruction*

The Fundamentals of Instruction (FOI) (FAA, 2008) incorporates the four levels of the Kirkpatrick Model (Kirkpatrick, 1959; Kirkpatrick & Kirkpatrick, 2006) for instructors.

- Level 1: Reaction. The initial level is where the learner's reaction to training is gathered and assessed. Effective pilot training is based on the knowledge and understanding of principles, along with the skillset essential for flight.
- Level 2: Learning. The extent to which pupils have acquired knowledge, skills, and attitudes is evaluated at the second level of the model. The better a student understands the theory and principles, the easier it will be for that student to become a safe and competent pilot. Understanding teaching and learning processes allows instructors to be better qualified to train high quality pilots. FAA training is directed toward developing safe and competent pilots (FAA, 2008). Chapter 1 of the FOI is devoted to the learning process.
- Level 3: Behavior. Behavior outcomes are symptomatic of training transfer - the extent to which the learning acquired has been applied to the workplace. The paramount factor in this equation is the instructor's own attitude toward instruction. Instructor attitude determines the overall effectiveness of the learning transfer method. Chapter 7 of the FOI is Instructor Responsibilities and Professionalism (FAA, 2008). Level 3 is about learning transfer defined by the FAA as “the ability to apply knowledge or procedures learned in one context to new contexts (FAA, 2008)”.
- Level 4: Results. The wider impact of learning. Comprehensive, meaningful, effective training is the goal. The true test of a pilot's skill and knowledge is the ability to perform under pressure and to evaluate where the results being achieved at the moment, are the best they can be.

### *Summary*

Both ab initio and currency training require similar elements for efficiency and effectiveness. Flight training and currency training require the same interaction between student and instructor (e.g., expertise, passion, nicety, and distance). Refreshers, repetition, and currency maintenance

combat skill decay. A focused oversight for the currency students, as well oversight of training for the instructor, is necessary for safety and effectiveness.

### **Chapter 3: Method**

A Google Forms Likert scale survey was distributed to the standardization pilots (SP) at AJF-11 to measure the SPs' perception of the currency/proficiency and training services delivered to ASIs. The response ratings of the survey ranged from 1 (strongly disagree) to 5 (strongly agree) for the first eight items. For the remaining seven items the scale ranged from 1 (never) to 5 (always). The items were grouped into seven categories: Training, Professionalism, Equipment Availability, Delays and Cancellations, Punctuality, Scheduling Conflicts, and Efficiency.

#### *Survey Participants*

Surveys were sent to the five FAA standardization pilots who are employed at AJF-11. Three of the five standardization pilots completed the survey. No demographic information was collected. Survey participants were not financially compensated, and participation was voluntary and anonymous.

#### *Materials*

The survey consisted of 15 Likert scaled items (see Appendix A). Items were categorized as Training (3 items), Professionalism (3 items), Equipment Availability (2 items), Delays and Cancellations (3 items), Punctuality (2 items), Efficiency (1 item), and Scheduling Conflicts (1 item). A consent form preceded the survey. The research team, who have expertise in aviation, reviewed the items for content validity. All materials were reviewed and approved by the Institutional Review Board at Embry-Riddle Aeronautical University.

#### *Procedure*

An email was sent to all standardization pilots at AJF-11 requesting participation. A follow up email reminding the SPs to participate in the survey was sent out 1 week after the initial email. If the individual chose to participate, he or she selected a hyperlink attached to the email. Selecting the hyperlink initially displayed the consent form. Participants were instructed to complete the survey only after selecting "Agree," on the Google Forms website. Selecting "Agree" meant that the participant acknowledged that they read and understood the terms of the consent form.

## Chapter 4: Survey Results

The survey items and response means can be found in Table 1 and Table 2.

Table 1

*Results of survey items 1 – 8 completed by FAA standardization pilots  
(1 = Strongly Disagree, 5 = Strongly Agree).*

Survey Item	Mean
The recurrent training given to ASIs is consistent across IPs.	2.67
Evaluation of ASIs is consistent across IPs.	2.67
Compliance of ASI curriculum is maintained.	3.33
IPs dress professionally.	4.33
IPs are professional in communication with ASIs.	3.67
IPs deliver instruction in a professional manner.	3.33
Aircraft are readily available for instruction.	2.67
Simulators are readily available for instruction.	3.67

Table 2

*Results of survey items 9 - 15 completed by FAA standardization pilots (1 = Never, 5 = Always).*

Survey Item	Mean
Flights are cancelled due to weather.	4.67
Flights are cancelled for reasons other than weather (e.g., scheduling/maintenance).	4.33
Flights are delayed.	4.33
ASIs show up for their scheduled day.	3.67
IPs show up on time.	3.33
There are many conflicts (starting on time, etc.) due to scheduling.	3.33
Overall, the existing administration for ASIs training is efficient.	2.33

Figure 1 graphically displays the survey participant response means of Item 1 through Item 8 (questions about training, availability, and equipment availability) and Figure 2 graphically displays the means of participant responses for Item 9 through Item 15 (questions about delays and cancellations, punctuality, scheduling conflicts, and efficiency).

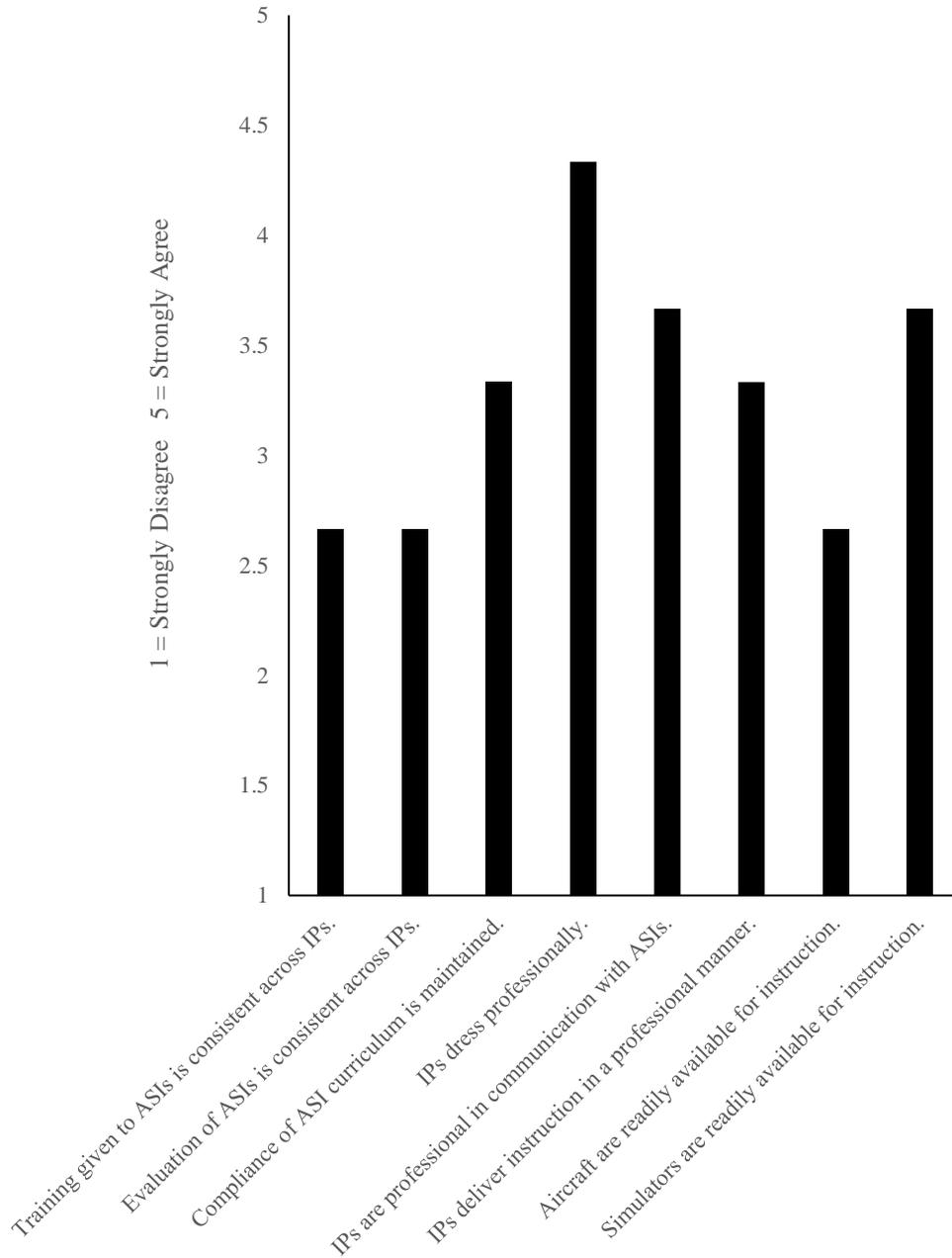


Figure 1. FAA Standardization Pilot Survey Averages (Items 1 – 8).

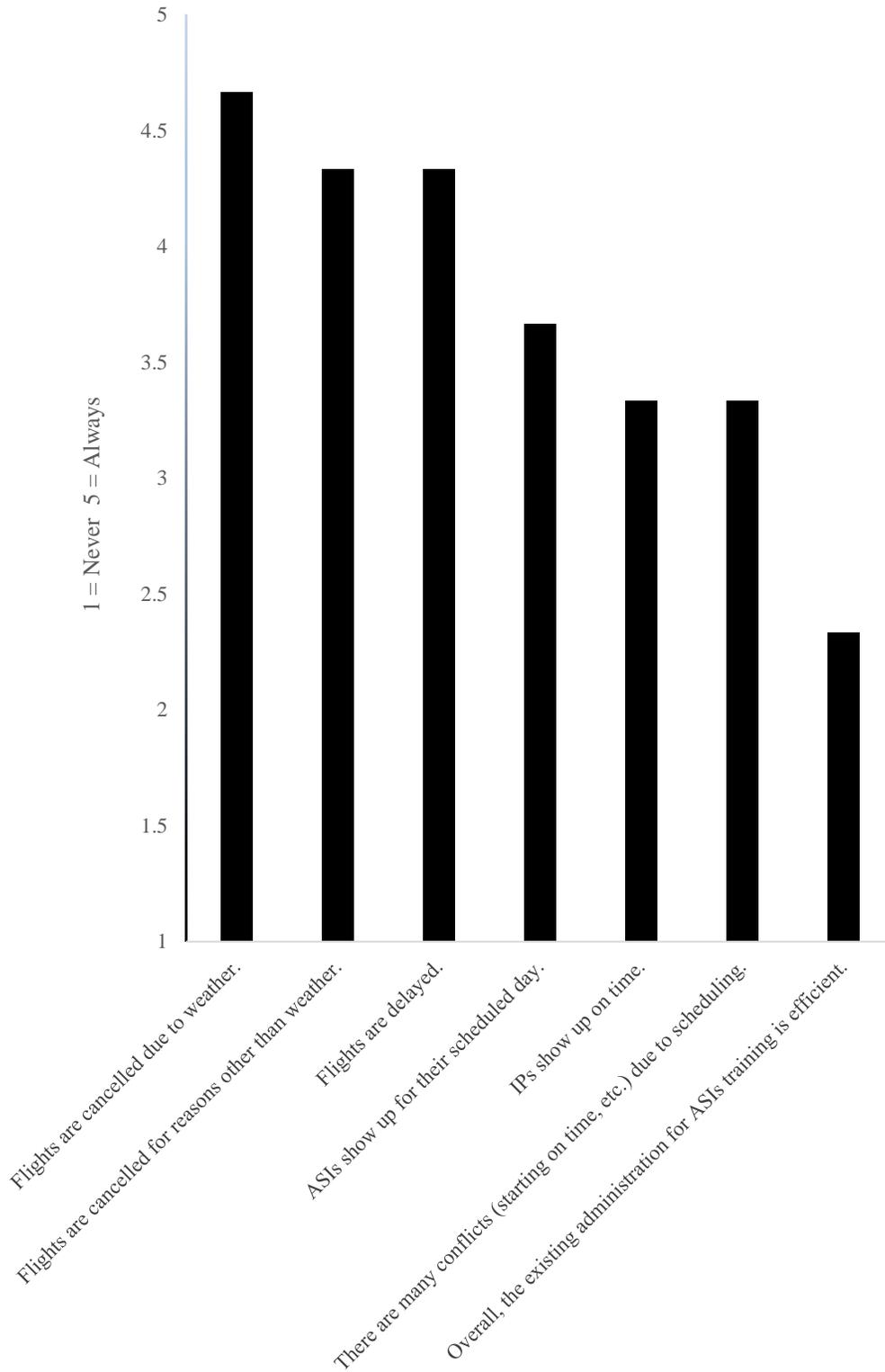


Figure 2. FAA Standardization Pilot Survey Averages (Items 9 – 15).

As can be seen in Figure 3, the three items of Professionalism have a mean of 3.78. The three items of Equipment Availability have a mean of 3.17. The three items pertaining to Training have a mean of only 2.89. The SPs mostly agree that the IPs dress professionally and to a slightly less degree interact with the ASIs professionally. However, the SPs mostly disagree that the IPs are consistent in their delivery of currency/proficiency and training services to the ASIs.

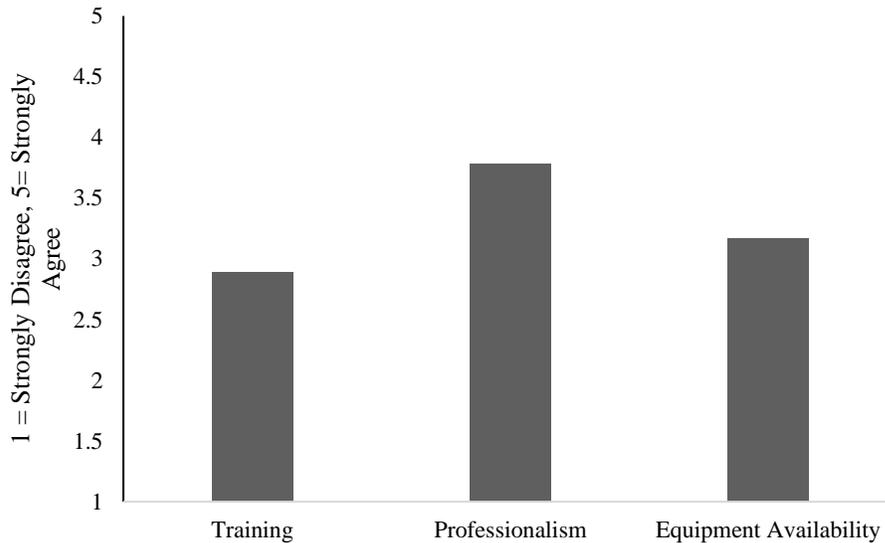


Figure 3. *Averages for Training, Professionalism, and Equipment Availability items.*

Figures 4 shows the three items for Delays and Cancellations have a mean of 4.44, the two items for Punctuality have a mean of 3.5, the item on Scheduling Conflicts has a mean of 3.33, and the item on Efficiency has a mean of 2.33. The SPs indicate the aircraft and simulators are frequently unavailable when they are needed. SPs indicate that planes and simulators are frequently unavailable at scheduled times due to weather and other reasons. There are some issues with both ASI and IPs showing up on time, which may have an effect on aircraft and AATD availability. SPs do not feel the overall training program is efficient.

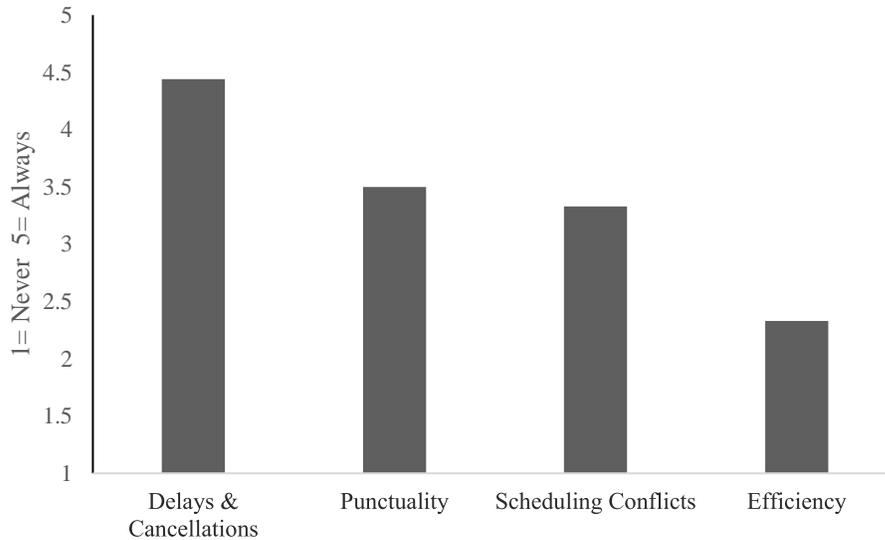


Figure 4. *Averages for Delays & Cancellations, Punctuality, Scheduling Conflicts, and Efficiency items.*

#### *Survey Results Summary*

The SPs responded that the IPs are professional in their attire, communication, and delivery of currency training to ASIs. SPs indicated that neither the IPs nor the ASI are very punctual. Additionally, the SPs indicated the Equipment Availability, Delays and Cancellations, and Scheduling Conflicts were of concern. However, it could not be ascertained from the survey if issues with these additional concerns are impacted from issues with tardiness. Most concerning is the SPs responses to the Training (consistent training, consistent evaluation, and compliance) and Efficiency of the currency program. SPs bear the responsibility for ensuring consistent training, consistent evaluation, and compliance, which suggests an alternative approach (i.e., Part 141 model) should be explored. These issues can be related to a number of factors, such as turnover of IPs, high workload, oversight, and not enough structure in IP training. The next section will summarize the current currency/proficiency and training and explore how a more structured approach (i.e., Part 141 model) may benefit the concern listed by the SPs.

## **Chapter 5: Current IP Training Program**

The Flight Program Operations Flight Program Supplemental Training Program (STP) is designed to ensure that IPs remain adequately trained for each aircraft, duty position, and type of operation. Trainees progress through the program step-by-step, which means that each trainee must demonstrate a satisfactory level of knowledge through oral or written questioning before moving to the next subject. Additionally, the skills and successful performance of each maneuver must be demonstrated. The training and checks used in STP are equivalent to those required by 14 CFR Part 135, which meet and exceed the requirements of 41 CFR 102-33.175.

The training includes both ground and flight training. For ground training, trainees demonstrate their knowledge of the subject area through oral, written or computerized questioning during the conclusion of a module. For flight training conducted in an aircraft or a flight simulator, trainees are trained to the proficiency of the applicable Practical Test Standards (PTS) referenced in the Task-Condition-Standards (TCS) documents and demonstrate their performance to these standards before completion of each curriculum segment. Lectures, self-study assignments, computer-based training (CBT), demonstrations, and the performance of hands-on drills are used as methods of providing the training.

The training is divided into four basic categories: Initial New Hire (INH), Recurrent, Requalification, and Special training. Trainees are assigned to each category of training based on their previous experience and the aircraft and the duty position for which they were previously qualified. Each training category consists of curriculum segments which are grouped and classified as Basic Indoctrination, Emergency Training, Hazardous Materials, Aircraft Ground, Flight, Qualification, and Special Segments. The subject areas that each training curriculum provides are available in Figure 1-2 Table of Required Training in the Supplemental Training Program Manual. Only the Requalification category will be considered for this proposal.

## **Chapter 6: Proposal for the Utilization of a Part 141 Certificated Pilot School for Currency/Proficiency and Training Services**

Currently, currency/proficiency and training services for AVS participants in the FAA Flight Program are delivered via a vendor, operating under 14 CFR Part 61, but modeled under Part 135 in some areas. Although Part 61 specifies requirements for flight training, both specifically for licenses and ratings, and more generally for such things as recency of experience and proficiency, it takes an individualist approach in that the flight and ground training is controlled primarily by the instructor within the constraints of the rather broad regulatory framework. As such, Part 61 requirements for pilots, flight instructors, and ground instructors are specific only to the airman certificate, and not to the training provider. This allows for a wide range in areas such as quality and standardization of flight and ground instructors, training curriculums, and aircraft. Further, the oversight of such training primarily occurs at the end of said training via a check ride with a designated pilot examiner (or ASI performing his or her primary job function). With the current contracted vendor, some of this variance is removed by requiring specific curriculums, specified appropriate aircraft and standardization of instructors employed by the vendor. It is, nonetheless, worth considering the additional and independent oversight provided by requiring a training vendor to be certificated under 14 CFR Part 141.

Pilot schools and agencies certificated under Part 141 have historically enjoyed the anecdotal reputation of providing higher quality of training although this has not been adequately substantiated through independent research. For example, many Part 141 schools cite the rigorous process of obtaining FAA approval, the use of standardized curriculums, flight instructor standardization, approved maintenance facilities, approval for veterans' benefits, a required minimum pass rate, and reduced training hours. Those touting Part 61 training predominantly highlight the flexibility allowed under this part, the fact that most students do not complete all certificate or rating requirements in less time under Part 141 for a variety of reasons (e.g., scheduling conflicts, maintenance and weather delays), and that Part 141 regulations were written many years ago and do not take into account more contemporary practices.

In considering whether to transition to a training vendor certificated under Part 141, several key areas must be noted. For ease of consideration, these follow the appropriate regulation sequentially (FAA, 2018).

### **Subpart A—GENERAL**

141.5 In requiring a vendor to have a Part 141 certificate, it must be remembered that to obtain or hold said certificate, a school must

- be approved for at least provisional status (for the previous 24 months)
- meet the applicable parts of A through C of Part 141 (more on this later)

have an established pass rate of 80% on the end of course test for approved training course specified in appendix K of Part 141 (assumed as no certificate or rating is to be issued here)

- have graduated at least 10 different people from the school's approved training course(s).

141.7 Provisional pilot school certificate is available for those who do not meet the recent training requirements of 141.5(d) (i.e., the 80% pass rate).

141.11 The vendor will not be training for a certificate or rating so the approved course would fall under Appendix K (vi) special operations courses.

141.21 The vendor would be required to allow the Administrator to inspect its personnel, facilities, equipment and records to confirm legibility for certificate, compliance with 49 USC 40101 and compliance with Federal Aviation Regulations (FARs)s. This would add an additional layer of oversight beyond that of the contracting agency.

Part 141.25 The vendor must maintain a principal business office meeting the regulatory requirements noted herewith. The base of operations may be located other than where the principal business office is located but must be inspected by the Administrator.

Part 141.27 All training schools must have their school certificate and ratings renewed every 24 calendar months. A provisional pilot school may not have its provisional certificate or ratings renewed. It must apply for a pilot school certificate and associated ratings if they meet 14 CFR Part 141.5. If not, they may apply for another provisional pilot school certificate after 180 days have elapsed since its last provisional pilot school certificate.

### **Subpart B—PERSONNEL, AIRCRAFT AND FACILITIES REQUIREMENTS**

141.33 This provides for oversight and qualifications of all pilot school personnel including chief flight instructors (see 141.35 specifically), any assistant chief flight instructors (see 141.36 specifically), check airmen (see 141.37 specifically), and instructors while also ensuring that all dispatchers, aircraft handlers and line service personnel are adequately instructed in their employment procedures and responsibilities.

141.38 This specifies certain requirements for airport operations while conducting Part 141 training flights. NOTE: this may be a factor depending on airports utilized.

141.39 This specifies requirements for aircraft utilized. Should not be a factor for the contractor but the vendor would need to meet the requirements.

141.41 This specifies requirements for full flight simulators, flight training devices, aviation training devices, and training aids. Relevant depending on contractor requirements.

141.43 This specifies pilot briefing areas.

141.45 This specifies requirements for areas provided for instructional purposes.

### **Subpart C—TRAINING COURSE OUTLINE AND CURRICULUM**

141.53 This provides general training course approval procedures for pilot schools.

141.55 Training course content requirements including such items as descriptions of classrooms, simulators, airports, aircraft and any special equipment required and training syllabus. Of particular concern is:

(c)(6) the minimum qualifications and ratings for each instructor assigned to ground or flight training;

141.57 An alternative for Appendix K if it would not deem suitable for the training course, 141.57 is recommended.

#### *141.57 Special curricula.*

An applicant for a pilot school certificate or provisional pilot school certificate may apply for approval to conduct a special course of airman training for which a curriculum is not prescribed in the appendixes of this part, if the applicant shows that the training course contains features that could achieve a level of pilot proficiency equivalent to that achieved by a training course prescribed in the appendixes of this part or the requirements of part 61 of this chapter.

### **Subpart D—EXAMINING AUTHORITY**

Not applicable as no certificates or ratings would be trained for or issued.

### **Subpart E—OPERATING RULES**

Of significance to vendor to ensure compliance with Part 141 requirements for pilot school certification.

### **Subpart F—RECORD KEEPING**

Of significance to vendor to ensure compliance with Part 141 requirements for pilot school certification.

### **APPENDICES A through J**

Not applicable as they pertain to aircraft certificates and rating courses (e.g., private pilots).

### **APPENDIX K Special Preparation Courses**

The appropriate Appendix for training course approval as no certificate or rating is to be trained or issued. As specified here:

**9. *Special operations course.* An approved special preparation course for pilots in special operations that are mission-specific for certain aircraft must include at least the following—**

**(a) Aeronautical knowledge training on:**

- (1) Performing that special flight operation;**
- (2) Safe piloting operating practices and procedures for performing that special flight operation;**
- (3) Applicable parts of this chapter that pertain to that special flight operation; and**
- (4) Pilot in command duties and responsibilities for performing that special flight operation.**

**(b) Flight training:**

- (1) On that special flight operation; and**
- (2) To develop skills, competency, proficiency, resourcefulness, self-confidence, and self-reliance in the student for performing that special flight operation in a safe manner.**

#### **APPENDIX L Pilot Ground School Course**

Specifies aeronautical knowledge training requirements, specifies an adequate number of training hours, and requires stage checks and end of course tests, as appropriate to the course. Also specified in Appendix K (5).

#### **APPENDIX M Combined Private Pilot Certification and Instrument Rating**

Not applicable.

#### **Benefits**

One of the main benefits of the application of a Part 141 model to the current program is the standardization of training according to the corresponding Part 141 regulation. Flight Program Operations remains interested in contracting out the delivery of currency/proficiency and training services delivered to AVS participants in the FAA Flight Program. The application of the Part 141 model will appropriately vest oversight of the execution of the model with the jurisdictional FSDO, leaving the training to the Flight Program Operations vendor. In addition, adherence to the model implies that the requalification program in general and its elements, including requirements for IPs and aircraft mechanics who maintain the fleet in working condition, can be standardized and customized for the needs of Flight Program Operations. This model will also allow for a possibility of on-sight inspections at the AFW facility conducted by the FSDO.

Currently, preparation and training of the IPs are overseen by the Vendor. If the FAA Flight Program Operation institutes a Part 141 model, the training program will be developed and executed by the Vendor, but the oversight will be performed by the Vendor's jurisdictional FSDO, which supports independent AVS oversight that is consistent with the principles of consolidation. The benefit of this approach is in the increased amount of vendor oversight the agency (through AVS) will have on the training program.

The formal training course materials provided by AFS, as well as the individual event-based currency (EBC) task lists and associated TCS documents could be submitted to the vendor/pilot school as specialty curricula under Part 141. Execution of these EBC currency/proficiency flights, as well as formal training events, in single/multi-engine airplanes and rotorcraft would be under the operational control of vendor/pilot school (under the auspices of the 141 air agency certificate). Flight Program Operations would maintain operational control of the FAA-owned turboprop aircraft outside of the 141 air agency certificate, but the vendor could still provide contract IPs to support execution of services in that platform.

Part 141 model is standardized, accepted, and utilized across the country, meaning that Flight Program Operations might have a bigger selection of potential vendors for the program who are already certificated to execute training operations under Part 141. Moreover, the vendors/pilot schools already certificated under Part 141 do have experience in managing flight training operations. The benefits of choosing a more experienced Part 141 vendor are potentially increased quality of training personnel and well-prepared and practiced training procedures.

## **Chapter 7: Conclusion and Recommendations**

It is suggested that currency/proficiency and training services in leased single/multi-engine airplanes and rotorcraft be conducted by an entity that has a Part 141-K issued certificate. Advantages of a 141-K issued certificate would be more standardization in delivery of training and independent AVS oversight of the vendor. A Part 141 certificate also affords structured evaluation and assessment of IPs.

A prospective vendor can apply for Part 141-K (Special Operations) Air Agency Certificate as the sole program, or in addition to other Part 141 programs. Oversight for curricula under Part 141-K will be delegated to the pilot school's local FSDO. If Flight Program Operations decides to incorporate the requalification program as a Part 141 operation, then it should be decided if multiple vendors will be selected (e.g., one vendor for rotorcraft operations, one vendor for single/multi-engine aircraft operations). Under Part 141, the vendor/pilot school has operational control of flights conducted under the air agency certificate. Although multiple vendors can be selected, a single vendor/pilot school would need to deliver currency/proficiency and training services in an individual make/model in order to fit the paradigm. (Note: Any contract IPs supporting the FAA-owned turboprop aircraft would be outside the auspices of the Air Agency Certificate.)

Establishing a Part 141-K program for currency/proficiency and training services delivered to ASIs may solve many of the perceived issues and concerns articulated by the SPs. First, a Part 141-K program should provide greater consistency of training ASIs receive. Second, evaluation will be more standardized. Third, oversight would be shifted to the jurisdictional FSDO, relieving AJF-11 of both training and standardization/oversight functions. Thus, it is recommended that a Part 141-K program be required for the currency/proficiency and training services delivered by the AJF-11 in leased single/multi-engine airplanes and rotorcraft.

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Appendix A. Survey sent to Standardization Pilots at AJW-32

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IPs are professional in communication with ASIs.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

IPs deliver instruction in a professional manner

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Aircraft are readily available for instruction

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Simulators are readily available for instruction

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

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The recurrent training given to ASIs is consistent across IPs

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Evaluation of ASIs is consistent across IPs

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Compliance of ASI curriculum is maintained

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

IPs dress professionally

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Flights are cancelled due to weather

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

Flights are cancelled for reasons other than weather (e.g., scheduling/maintenance).

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

Flights are delayed.

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

ASIs show up for their scheduled day

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

IPs show up on time

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

There are many conflicts (starting on time, etc.) due to scheduling

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

Overall, the existing administration for ASIs training is efficient

	1	2	3	4	5	
Never	<input type="radio"/>	Always				

Please provide any additional comments about the ASI recurrent training program

Your answer \_\_\_\_\_