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The Private Pilot Practical Test: Survey Results From Designated Pilot Examiners and Newly Certificated Private Pilots

Carla A. Hackworth[1]
S. Janine King[2]
Crystal Cruz[3]
Suzanne Thomas[2]
Carrie Roberts[2]
Cristina Bates[1]
Roger Moore[4]

[1]Civil Aerospace Medical Institute
Federal Aviation Administration
Oklahoma City, OK 73125

[2]Xyant Technology, Inc.
Oklahoma City, OK 73125

[3]FAA Flight Standards (AFS-630)
Oklahoma City, OK 73125

[4]FAA Flight Standards (ASW-200)
Fort Worth, TX 76137

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Carla A. Hackworth,[1] S. Janine King,[2] Crystal Cruz,[3] Suzanne Thomas,[2] Carrie Roberts,[2] Cristina Bates,[1] and Roger Moore[4]	

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16. Abstract

The Federal Aviation Administration (FAA) considers the reduction of general aviation (GA) accidents to be one of its highest priorities. Ensuring that pilot applicants receive complete and thorough practical examinations that are in full compliance with the appropriate practical test standards is one of the many safeguards in place to improve general aviation safety. Designated Pilot Examiners (DPEs), FAA aviation safety inspectors, and schools with examining authority operating under Title 14 of the Code of Federal Regulations (CFR) Part 141 serve as gatekeepers of aviation safety by ensuring that only pilot applicants that meet all of the regulatory certification requirements are issued pilot certificates. This study used two separate survey instruments to assess practical test examination practices nationally by soliciting feedback from DPEs and newly certificated GA pilots.

The first instrument surveyed DPEs. We mailed 848 surveys to DPEs across the United States and screened returned surveys to include only those who had conducted at least one first-time private Pilot Airplane Single-Engine-Land (P-ASEL) practical test in the previous 12 months. Five hundred-forty respondents (64% response rate) met this criterion for inclusion in this paper. The final sample included experienced pilot examiners where over 64% indicated they had been an examiner for at least 11 years. Within the 12 months previous to completing the survey, pilot examiners conducted an average of 30 first-time private P-ASEL category and class rating tests, with 59% indicating that at least 81% of their first-time applicants passed. Nearly 99% of examiners reported using a written plan of action when conducting a practical test.

The second instrument surveyed newly certificated GA pilots about their training and practical testing experiences. We mailed 4,216 surveys to pilots who were newly certificated on or after August 1, 2005 for the P-ASEL category and class rating. Returned surveys were screened to include only pilots who were tested by an examiner (includes ASIs, designated pilot examiners, and those tested by both a final phase check and examiner) and to include only those who had no previous private P-ASEL category and class rating practical test failures. This left 1,112 surveys (26% response rate) for reporting purposes. The average amount of time between the certification date and survey completion was less than three months (M=2.7 months; N=986). Source of training for pilots was split across pilot schools (Part 141 and non-Part 141: 43%), and independent flight instructors (57%). The majority of pilots were positive about the quality of flight instruction they received, with more than 80% giving high marks. When commenting upon their practical test experience, more than 95% reported that they were tested on stalls (power-on and power-off), spin awareness (82%), aeronautical decision-making (85%), and in-flight collision avoidance (82%).

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The Private Pilot Practical Test: Survey Results From Designated Pilot Examiners and Newly Certificated Private Pilots

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for the safe and expeditious flow of air traffic within the U.S. Tracking aviation accidents is one way in which the FAA measures the relative safety and performance of pilots operating in the National Airspace System (NAS). This is a common approach to understanding safety (Helander, 2006). According to National Transportation Safety Board (NTSB) preliminary statistics for 2005, U.S. general aviation (GA) accidents occurred at a rate of 6.83 per 100,000 flight hours (NTSB, 2005). Although this rate may seem to be low and has declined over the past decade, it is higher than the accident rates of U.S. air carriers operating under Part 121 of Title 14 of the Code of Federal Regulations (CFR) where the accident rate is .171 for scheduled and .942 for nonscheduled per 100,000 flight hours. The GA accident rate is also higher than U.S. operations under 14 CFR Part 135 that has accident rates at 2.0 for commuter and 2.02 for on-demand per 100,000 flight hours.

Several explanations have been offered as to why GA has a higher rate of accidents. For example, GA pilots perform more take-offs and landings, and these phases of flight are most frequently reported for pilot-induced accidents (Nall Report, 2005; Craig, 2001; Department of Transportation FAA Pilot's Handbook, 2003). GA pilots also use less improved runways and perform various types of missions such as recreational, agricultural, and instructional operations (Nall Report, 2005; Craig, 2001). Additionally, GA includes a subset of less-experienced pilots (Craig, 2001). This is not to suggest that all GA pilots are less experienced, but that pilots generally begin their flying career within this arena of operations; therefore, GA includes less experienced pilots.

Accidents are thought to be the end result of a series or combination of causal and contributory events (Reason, 1990; Shappell & Wiegmann, 1997). While this may sound obvious, the logic has repercussions on how best to reduce accidents. If multiple factors come together to cause or contribute to an accident, then multiple approaches may work to prevent an accident. Alternatively, one "fix" may target only one specific causal event within the series. This may be enough to prevent accidents because it stops the chain of events from occurring. However, the other vulnerabilities still remain. Thus, a multifaceted approach to accident prevention promises the greatest advantage.

Together, the aviation industry and the FAA have engineered numerous efforts aimed at creating checks and balances to prevent accidents. The FAA relies upon the many men and women who serve as instructors to train pilots on the concepts and procedural techniques required for safe flight operations. Additionally, pilot examiners and Part 141 schools with examining authority serve as gatekeepers of safety by ensuring that only those capable of safely performing as pilot in command are certificated with those privileges.

A person (student) earns a private pilot certificate through a course of required training and, ultimately, by successfully passing a series of tests. The student must pass a knowledge (written) test with a score of 70 or higher and receive additional instruction for any areas found deficient. Though the knowledge test may be taken at any time during the student's course of flight training, it is normally taken before the student's first solo flight. After the student has satisfactorily completed the requisite flight training and knowledge test, the student must receive an endorsement from an instructor or flight school, indicating preparedness for the required skills (practical) test (14 CFR Part 61.39). The practical test has two parts: oral testing and airmanship testing. The Private Pilot Practical Test Standards (PTS) detail the requirements within the areas of operation and tasks that the student applicant must successfully complete to obtain a private pilot certificate. Tasks within each area of operation describe the specific knowledge areas, procedures, or maneuvers required. Students can also achieve private pilot certification by successfully completing an FAA-approved training curriculum at a Part 141 pilot school or Part 142 training center but are still required to pass the knowledge and practical tests.

If the school has examining authority, the applicant is simply required to complete the course satisfactorily (which includes a series of phase checks administered by school officials). The student is not required to be tested by a Designated Pilot Examiner (DPE). Graduates of a pilot school without examining authority must be tested either by a DPE or by an FAA inspector. However, all graduates of a Part 141 school, with or without examining authority, must still conform to the pilot certification requirements of 14 CFR Part 61.

According to recent FAA figures, there are 609,737 certificated pilots in the U.S. (FAA, 2006). Of these,

228,619 (37%) are private pilots. According to 2005 FAA airmen statistics, approximately 92% of private pilots were issued an original certificate by a designated pilot examiner with an additional 0.3% issued by inspectors (FAA, 2005 Table 16). Therefore, it is critical that examiners are consistent when applying the testing criteria across applicants. Additionally, examiners must test all required Areas of Operation and associated tasks of the practical test to be in full compliance with the PTS. Adherence to the PTS is required by 14 CFR 61.43. This has not been found to be the case in all circumstances.

The FAA's Southwest Region (ASW) administered a series of surveys to GA Private Pilot Airplane Single-Engine-Land (P-ASEL) pilots newly certificated within their region in 2000, 2001, and 2003 and found inconsistencies between FAA policy, Part 61 requirements, and reported examiner practices. Some pilots surveyed reported that examiners did not assess all topics (i.e., areas of operation, knowledge areas, tasks, etc.) required by the PTS (unpublished Southwest Region assessment of GA pilots). It is possible, however, that applicants were not aware of all the topics that were evaluated. This may be due to examiners grouping several actions together and observing the applicant's performance without announcing that they are doing so. Therefore, it is possible that an applicant would not be aware of all topics that were assessed. However, for questions and maneuvers that have a significantly higher degree of difficulty (e.g., emergency landings, stalls, and steep turns), this lack of awareness is less likely.

In addition, for some areas of the test, not all topics are required for testing. For example, according to the ASEL PTS (FAA, 2002), an examiner can ask an applicant to explain at least three physiological symptoms within the task of Aeromedical Factors. The PTS also requires that only one task be completed within the Area of Operation: Ground Reference Maneuvers (i.e., rectangular course, s-turns, or turns around a point), and within Basic Instrument Maneuvers, examiners must assess recovery from unusual flight attitudes and at least two other tasks (i.e., straight-and-level flight; constant airspeed climbs; constant airspeed descents; turns to headings; or radio communications, navigation systems/facilities, radar services). Thus, if an applicant indicated not having been tested in all areas of these tasks, it may be because those tasks were not among the ones selected by the examiner for inclusion in the test. Therefore, it is reasonable to find that some pilots may have said they were not tested on a maneuver because of any of the aforementioned reasons. However, some maneuvers are not likely to be combined and have a specific testing requirement outlined within the PTS. If pilots indicated that these areas were not tested, this indicates that examiners did not comply with PTS standards of testing.

According to ASW survey results, some examiners allowed the unauthorized repetition of questions and maneuvers that were answered incorrectly or performed poorly (unpublished Southwest Region assessment of GA pilots). Allowing repetition for these reasons does not conform to the PTS. The following caveats are important: 1) The definition of poor performance was applied by the data analysts to explanations provided by the respondents and does not necessarily indicate that the respondent exceeded the specified PTS; 2) An examiner may ask an applicant to repeat an action for clarification or because the applicant did not complete the task. Even so, examiners are not authorized to ask an applicant to repeat an action because the applicant did not perform or respond correctly on the first attempt (FAA, 2002). Learning how to perform a maneuver correctly and consistently should be the objective and is a regulatory requirement. Of course at the time of the exam, the student is focused on passing the test, and because of the sacrifice in time and money, and natural uneasiness with any evaluation, he/she may be nervous and experience difficulty during the exam. Nonetheless, the test criteria are in place for safety reasons and, ultimately, examiners do not help pilots by allowing them to repeat an action or maneuver due to poor performance.

Accidents occur nearly every day in general aviation. Many involve some form of human error committed by the aircrew (Wiegmann et al., 2005). Several reports have highlighted the role of pilot error within many GA accidents. For example, the Nall Report (2005) found that over 75% of GA accidents in 2004 involved pilot error. Similarly, Detwiler et al. (2006), reported errors involving pilot attention, memory, and airman technique in slightly over 70% of GA accidents from 1990 to 2002. Ensuring that pilots are capable of performing the designated maneuvers required as pilot in command is a necessary, proactive safety measure.

In October 2004, the Government Accountability Office (GAO) released a report that was critical of the FAA's designee programs (GAO-05-40). Part of their criticism was aimed at the way the FAA has conducted evaluations of its designee programs. The FAA relies upon several types of designees to act as FAA representatives in an examination process (e.g., aviation medical examiners, designated mechanic examiners, and DPEs). This paper is focused on the pilot examination process. Flight Standards District Offices (FSDOs) provide direct oversight of this process. FSDOs must ensure that DPEs conform to the pilot certification requirements of 14 CFR Part 61 and the PTS when acting as FAA representatives in the performance of flight tests. The GAO noted that the FAA's Flight Standards Service (AFS) employed a quality assurance team to examine DPE practices at many field

offices. Further, they highlighted the previously mentioned efforts of ASW, whereby that region attempted to identify areas in need of improvement within their examiner population. However, the GAO recognized that the evaluation effort had not been expanded to other FAA regions.

Our purpose was to expand the previous findings by ASW and assess whether or not examiners are in full compliance with the regulatory pilot certification requirements of 14 CFR Part 61 and the PTS across the U.S. To accomplish this, two surveys were administered. DPEs who administered the Private P-ASEL practical test were surveyed regarding their examination practices while conducting practical tests. Additionally, a national private pilot survey assessing practical test experiences was administered to pilots who were newly certificated for the Private Pilot certificate with the ASEL category and class rating.

METHOD

Designated Pilot Examiner Survey

Participants

A survey was sent to all DPEs across the U.S. authorized to conduct practical tests for the Private Pilot Certificate with an airplane single-engine land (P-ASEL) category and class rating (N=848) in early November 2005. Names, addresses, and respective FAA regions of each DPE were obtained from the FAA's Flight Standards Certification Program Office (AFS-900). Survey participation was voluntary and results were confidential. Of the returned surveys, only those examiners who acknowledged that they had conducted at least one first-time P-ASEL practical test within the previous 12 months were included in the analysis. As a result, 540 (64%) surveys were analyzed.

DPE Survey Instrument

The survey included 39 items that asked DPEs about their practical testing procedures and practices (Appendix A). Items covered five general categories: 1) general DPE background including number of tests conducted, certifications held, pass-rate, and examination fees; 2) DPE examination practices; 3) FAA Principle Operations Inspector (POI) oversight; 4) FAA support and oversight; and 5) DPE observations of their applicants' general level of readiness and proficiency to take the practical test. Responses to several queries for comments were transcribed and coded by content into categories.

DPE Background

The first survey category covered general background information about DPEs' testing activity (e.g., number of tests conducted, certificates issued, and testing fees). Specifically, DPEs indicated the number of practical tests that they had conducted in the previous 12 months (total number of P-ASEL tests, first-time P-ASEL, and P-ASEL re-tests) and the usual fee charged for conducting the tests and re-tests. Further, DPEs were asked what percentage of their first-time P-ASEL applicants who were tested in the previous 12 months passed the practical test.

DPEs were also asked how long they had been authorized to act as an FAA DPE, if they had ever been an FAA Aviation Safety Operations Inspector, and if so, had they observed, renewed, or reinstated DPEs? Also, DPEs indicated whether or not they were an Aviation Safety Counselor.

DPEs commented on their personal flying experience, that is, if they maintained flight proficiency for the P-ASEL category and rating, and the number of hours they operated annually as a pilot in command. Similarly, DPEs indicated if they were proficient in each make and model of aircraft used to conduct practical tests.

DPE Exam Practices

Several items were directed at DPEs' practices while conducting practical tests. For example, they indicated how much time was spent administering the flight and oral (ground) portions of the practical tests. As well, DPEs were asked whether they used a written Plan of Action (POA) when conducting a practical test and if variations of that POA were used while conducting first-time practical tests or re-tests.

DPEs were also asked if they had ever provided applicants with a second-chance opportunity to perform a specific task or maneuver due to an unsatisfactory performance and, if yes, to explain why.

Principle Operations Inspector Oversight

DPEs were asked to indicate the number of times in the previous 24 months that they had been observed by a Principle Operations Inspector (POI) while conducting practical tests, whether they had been observed by a POI while conducting oral or flight portions of a test, if a POI had ever acted as an applicant to assess the examiner's proficiency, and whether POIs were professional and courteous while conducting observations.

DPEs also noted any unsatisfactory findings that had been made regarding their performance as a GA-ASEL DPE, and, what, if any, remedial training or corrective action was required. When training or corrective action was required, DPEs indicated whether their testing privileges were suspended pending completion of the requirements and if their examiner designation had ever been involuntarily suspended.

FAA Support and Oversight

Six items assessed the level of FAA support and oversight provided to DPEs. This included asking about the overall adequacy of administrative assistance, timeliness and clarity of information received from the FAA, and benefits of the DPE biennial recurrent training courses and the annual FSDO DPE meetings. DPEs were also asked to indicate their interest in attending FAA-sponsored standardization courses.

DPE Observation of Applicant's Proficiency

DPEs were asked for their impression of the current level of applicant proficiency. For example, DPEs were asked what percentage of first-time P-ASEL applicants performed unsatisfactorily during the oral and flight portions of their practical tests. Additional items asked DPEs their perceptions of how adequately instructors are preparing first-time Private Pilot ASEL applicants for the oral (ground) and flight portions of the practical test. Finally, DPEs were asked if they provided feedback to the recommending instructors when an applicant either failed or passed.

DPE RESULTS

The sample comprised experienced DPEs. More than 64% indicated that they had been a DPE for at least 11 years. Nearly 60% reported that they were an Aviation Safety Counselor. DPEs reported conducting an average of 35 (M=34.61; N=535) P-ASEL practical tests during the previous 12 months and of those conducted, an average of 30 (M=30.02; N=534) were first-time P-ASEL tests. Nearly all DPEs (99%) stated that they maintain flight proficiency for the P-ASEL rating, and 71% maintain proficiency in each make and model of aircraft in which they conduct a P-ASEL practical test. More than half of DPEs (59%) also reported that at least 81% of the first-time P-ASEL applicants that they tested in the previous 12 months passed the test (see Figure 1). The majority of DPEs (67%) indicated that their usual fee for conducting a P-ASEL practical test was between $201 and $300. See Figure 2 for all fees.

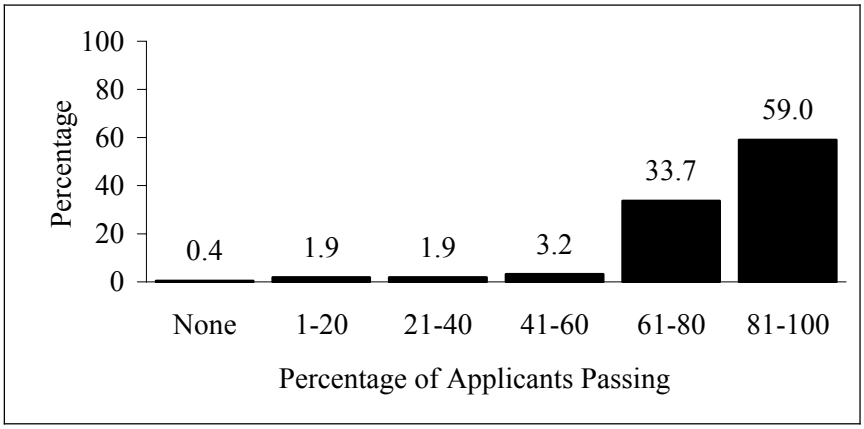

Figure 1. Percentage of Passing First-time Private Pilot ASEL Applicants

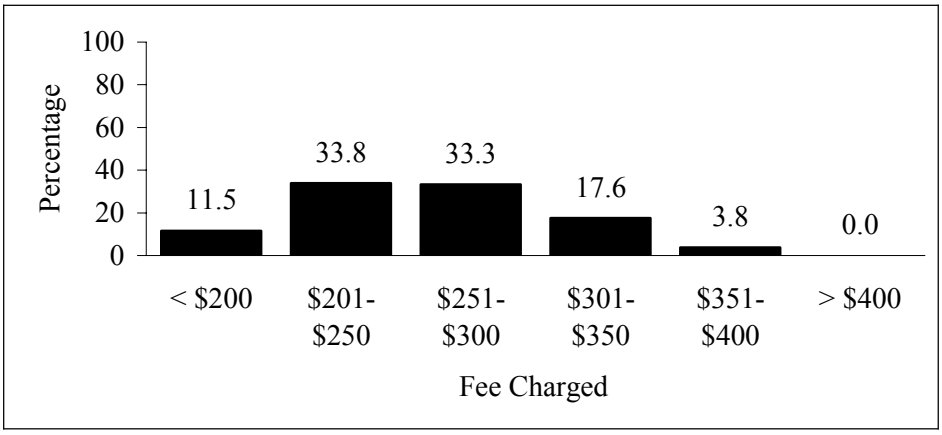

Figure 2. Percentage of Private Pilot ASEL Fees

Plan of Action and Time to Administer Exams

When asked about their testing practices, nearly 99% of DPEs reported using a written plan of action when conducting a practical test. Of the DPEs who had used a written action plan, most indicated using variations of that plan when testing both first-time and re-test P-ASEL applicants (87% and 80%, respectively). For first-time P-ASEL applicants, 66% of DPEs spent between 1½ to 2½ hours administering the oral portion of the practical test and 87% spent 1 to 2 hours administering the flight portion of the test.

POI Oversight

DPEs provided information regarding POI oversight. Specifically, 65% of DPEs indicated that they had been observed by a POI at least once while conducting a P-ASEL practical test in the previous 24 months. As well, nearly 83% reported having been tested by a POI on selected flight maneuvers, and 63% reported having had a POI act as an applicant to assess their examiner proficiency.

FAA Support and Oversight

The majority of DPEs were positive about the level of support and oversight provided by the FAA in that they agreed or strongly agreed that they were provided adequate assistance when needed (89%) and that information received from the FAA was clear and concise (80%) and timely (78%). Fewer DPEs were positive about the benefits of biennial standardization courses and annual meetings (64% and 70% agreed or strongly agreed, respectively).

Adequacy of Flight Instruction

When asked about the adequacy of flight instruction P-ASEL applicants were receiving, 34% reported that instructors were preparing flight students for the oral (ground) portion of the test to a considerable extent or greater. DPEs rated applicant preparation for the flight portion somewhat higher, with 47% indicating considerable extent or greater (Figure 3).

For the oral portion of the test, 61% of DPEs reported that up to 10% of applicants performed unsatisfactorily, and 71% of DPEs indicated that up to 20% of applicants performed unsatisfactorily on the flight portion. When DPEs were asked to what extent they provided feedback to the recommending instructor when an applicant failed the practical test, 90% provided feedback to at least a considerable extent, while 65% provided feedback to at least a considerable extent when an applicant passed.

Examination Practices and Repeated Maneuvers

Finally, regarding examination practices, 25% of DPEs reported providing an applicant with a second-chance opportunity to perform a specific task or maneuver because the applicant's performance during the first opportunity was unsatisfactory (Figure 4).

DPEs who provided an applicant with a second-chance opportunity to perform a task or maneuver were asked to explain. Explanations were assigned codes across eight content areas (Table 1). An explanation may have been assigned up to three different content area codes. Misunderstanding or clarification of instructions to the applicant by the DPE was the most frequent code assigned

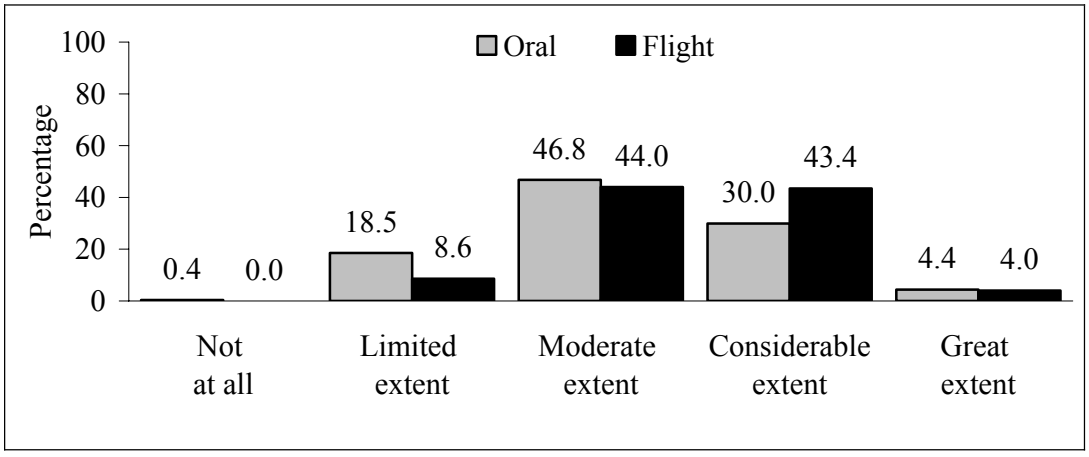

Figure 3. Preparation of First-time Private Pilot ASEL Applicants for the Oral and Flight Portions of the Practical Test

(29%), followed by poor or marginal performance (26%), and equipment failure or external factors (22%). Thus, although we asked DPEs specifically about those instances when they provided an applicant with a second-chance due to poor performance, their explanations included other reasons.

DPE DISCUSSION

The findings from the DPE survey were informative. One key to conducting consistent PTS evaluations is the use of an examiner's plan of action. Most DPEs reported that they used a POA when conducting a practical test and that they varied the POA at times, which helps prevent incomplete testing, complacency on the part of the DPE, and reduces the likelihood that instructors will simply become familiar with the rote examination practices of a particular DPE.

Nearly two-thirds of the sample reported that they had been observed by a POI while conducting a practical test within the past 2 years. Overall, DPEs were positive about the support received from the FAA, particularly with regard to the adequacy of support provided when needed and the accuracy/clarity of information provided. Perceptions concerning the benefits of the biennial standardization course and the FSDO annual meetings, however, indicate a need to make these requirements more relevant and meaningful for DPEs. Flight Standards is aware of this need and is working to standardize and improve the quality of the annual DPE meeting.

One main area of concern revealed by the data is that of applicant preparedness to successfully complete all areas of the practical test. DPEs reported that less than half of their applicants were well-prepared for the oral and flight portion of the PTS. The majority of DPEs reported providing feedback to instructors regarding the applicants' performance when the applicants passed the exam. Though, we did find that when applicants failed, more DPEs reported providing feedback. Identifying the specific knowledge areas where pilots were weak is necessary and warrants further investigation.

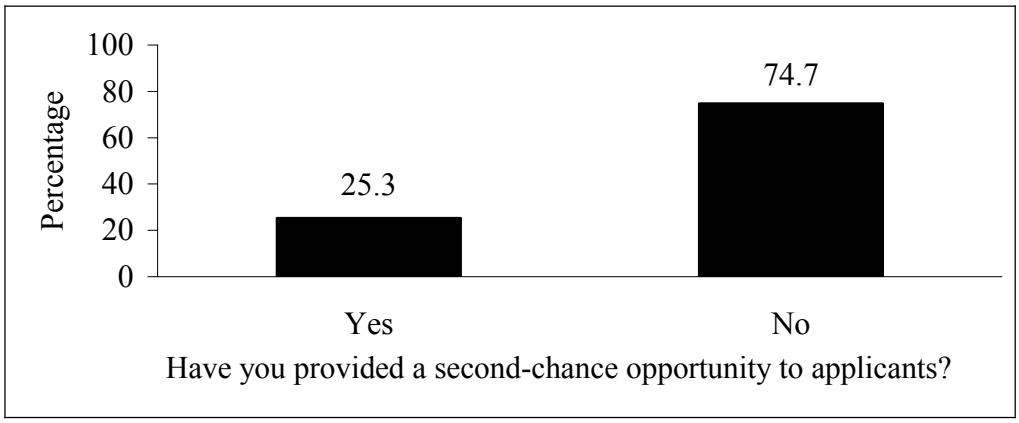

Figure 4. Percentage of DPEs Providing a Second-chance Opportunity to Applicants

Table 1. Coded DPE Explanations for Providing a Second-Chance Opportunity

Content Area	Percentage of Codes Assigned
Misunderstanding or Clarification of Instructions From DPE	29 %
Poor or Marginal Performance	26 %
Equipment Failure of External Factors	22 %
Weather	10 %
Instruction Provided by DPE	3 %
Applicant Initiated Repeat or Aborted Maneuver	5 %
Applicant Not Familiar With Maneuver/Topic or Different From Instruction	1 %
Other or Unknown Reason	4 %

**Note: Each explanation may have been assigned more than one code.*

Understandably, a word of caution should be noted—these findings are based upon a subset of the DPE population. Furthermore, these results have the shortcomings that exist with self-report data in general. For example, in this case, DPEs might try to place themselves in a positive light when providing feedback. Nonetheless, the findings are informative and worth consideration.

Private Pilot Survey

Participants

We distributed 4,216 surveys to pilots who were newly certificated on or after August 1, 2005 for the P-ASEL rating. Participation was voluntary and results were confidential. Returned surveys were screened to include only pilots who were tested by 1) an examiner, 2) an aviation safety inspector, or 3) both a final phase check and examiner, and who reported no previous P-ASEL practical test failures. This resulted in 1,112 surveys (26% response rate) for reporting purposes.

Private Pilot Survey Instrument

The survey contained 47 items covering four general categories: 1) certification information; 2) experiences with pilot school/independent flight instructor; 3) experiences with practical test examiner; and 4) personal demographic information. See Appendix B for the complete survey.

The first survey category contained three items intended to ensure that the pilot's most recent certification was for the P-ASEL rating and to determine how much time had lapsed between the date of certification and survey completion.

The second survey category included items that assessed how the pilots obtained their flight training, their use of the FAA PTS during training, their experiences with their pilot school/independent flight instructor, and perceived overall quality of the flight instruction received.

The third survey category was directed at the pilots' experiences with their practical test examiner. For example, how prepared was the examiner to conduct the practical test? And, did the examiner use a prepared, written plan of action to conduct the test?

The survey included items specifically assessing the oral and flight portions of the exam, such as, the extent to which the oral portion was conducted in a place free from distractions. Pilots were also asked to identify the subject areas briefed by the examiner prior to the flight portion of the test and PTS tasks evaluated or not evaluated by the pilot examiner.

Pilots estimated the amount of time they spent completing the flight and oral portions of the practical exam. They were also specifically asked about the flight portion of the exam. For example, they indicated if they made a go/no-go decision based on available weather information, the number of landings demonstrated, what type, and if they were asked to perform any maneuver for which they had not been adequately prepared by their instructor.

From a list of technical subject areas, maneuvers, and procedures (events), pilots selected which events were evaluated and repeated. Further, pilots were asked to provide reason(s) given by their examiner for any event they indicated repeating. Although the list was not exhaustive, some areas included: preflight procedures; takeoffs; landings; go-arounds; slow flight and stalls; simulated instrument conditions; and emergency operations. We coded the examiner's reason(s) provided by the pilots for request to repeat a maneuver into nine category codes that included weather, marginal or poor performance, equipment failure or external factor, instruction provided by the examiner, misunderstanding or clarification, applicant not familiar with procedure, applicant initiated repeat or aborted maneuver, maneuver performed in multiple directions, and unknown reason.

PRIVATE PILOT RESULTS

The sample comprised pilots who were newly certified for the P-ASEL category and class rating. The sample included pilots whose most recent practical test was a complete test (89%) or a partial test (11%). The average amount of time elapsed between certification and survey completion was approximately three months (M = 2.7 months; N = 986). Sources of training for pilots were split across pilot schools (43%) and independent flight instructors (57%).

Use of PTS and Adequacy of Flight Instruction

Nearly all pilots (95%) indicated that they had obtained a copy of the FAA PTS, and 97% said they used it to review the requirements for their practical test. Of those, 90% reported using the PTS to judge their performance of required flight maneuvers, and 84% reported using the PTS to determine the knowledge required for the oral portion of the practical test. The majority of pilots (94%) felt that their instructor(s) had adequately prepared them for the flight portion of their practical test to a considerable extent or greater; however, only 76% felt as prepared for the oral portion of the practical test (Figure 5). The majority of pilots were positive about the quality of the flight instruction they had received, with 82% giving their instructors high marks. When commenting upon their practical test experience, the majority of pilots (96%) indicated that the examiner who conducted their practical test was prepared and organized. Only 73%,

however, reported that their examiner had used a written POA to conduct the test.

Examination Practices

Pilots were asked to indicate which special emphasis areas were evaluated by their examiner during their practical test. The majority of pilots reported being evaluated on aeronautical decision making (85%), in-flight collision avoidance (82%), and runway incursion avoidance (71%). When asked to indicate which specific events were evaluated from a list of technical subject areas and maneuvers, 94% said they were asked about weather information, 93% indicated being evaluated on emergency approach and landings, 99% performed steep turns, and over 95% were evaluated on stalls (power-on and power-off). Nearly all pilots (99%) were evaluated on slow flight during their exam. Over 90% were evaluated on a variety of takeoffs and landings (normal, crosswind, soft- and short-field). For those who indicated that they did not demonstrate a crosswind takeoff, 80% reported that the examiner orally evaluated their knowledge. Similarly, for those who indicated that they did not demonstrate a crosswind landing, 81% reported that the examiner asked them to describe the technique. Close to three-fourths (73%) were evaluated on forward slip to a landing and go-around/rejected landings. The majority were evaluated on spin awareness (82%). Conversely, less than half reported being evaluated on night operations (44%).

Repeated Maneuvers

Pilots also indicated which events, if any, they were asked to repeat. Steep turns were repeated by 12% of pilots; 8% repeated short-field approaches and landings; and about 7% repeated soft-field approaches and landings, forward slip to a landing, turns around a point, and power-on stalls. As well, 5% reported repeating unusual flight attitude recovery. When asked the reason given by the examiner for the request to repeat, 30% of pilots provided a reason that we coded as marginal or poor performance.

Failed Maneuvers

When pilots were asked to indicate if they had performed any maneuver that failed to conform to the PTS requirements, 11% said yes (Figure 6), and of these, 86% reported that the error was noted by the examiner. In addition, 11% said that they were asked by the examiner to perform a maneuver or procedure or to explain a subject area for which they had not been adequately prepared by their instructor. These pilots were asked to explain the maneuvers or procedures for which they did not feel adequately trained. There were multiple topics represented within the comments; however, the most frequent topics included preflight preparation, take-offs, landings and go-arounds, and slow flight and stalls. Responses regarding a lack of preparation within preflight included examiner questions aimed at performance and limitations (e.g., density altitude) and operation of systems (e.g., avionics). Take-off and landing explanations included not being prepared for forward slips. Slow flight and stalls included not being adequately trained for turning stalls.

PRIVATE PILOT DISCUSSION

Pilots reported using the FAA PTS to review the requirements for their practical test, including learning the performance requirements for required flight maneuvers and knowledge required for the oral portion. Pilots felt

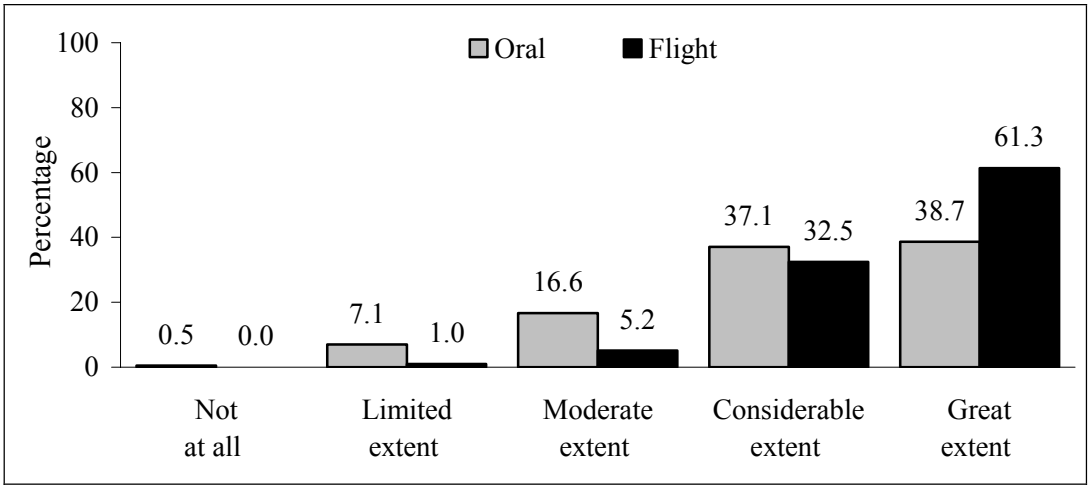

Figure 5. Extent Pilots Adequately Prepared for Oral and Flight Portions of the Practical Test

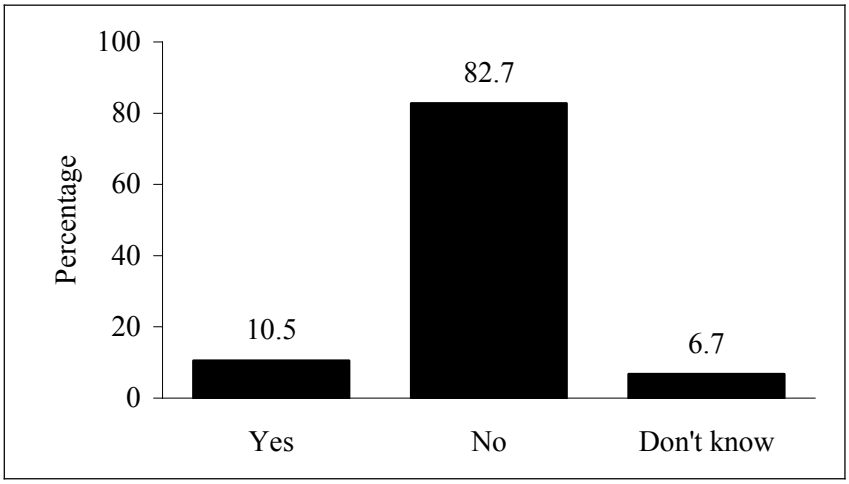

Figure 6. Percentage of Pilots Performing an Unsatisfactory Maneuver

that their instructor(s) had adequately prepared them for the flight portion of their PTS; but, they were less positive about their preparedness for the oral portion. The majority of pilots were positive about the overall quality of flight instruction they received.

Pilots were positive about their practical test experience, with the majority of pilots indicating their examiner was prepared and organized. However, compared to DPEs, fewer pilots noticed the use of a written plan of action during their exam. Perhaps pilots simply did not notice that their examiner was using a POA. A brief discussion with pilots about the use of the POA by examiners would negate this possibility.

The majority of pilots were evaluated on certain special emphasis areas such as aeronautical decision making, in-flight collision avoidance, and runway incursion avoidance. When asked to indicate the specific maneuvers, procedures, or technical subject areas on which they were evaluated, the majority of pilots indicated weather information, steep turns, stalls, and slow flight. Nearly all pilots were evaluated on a variety of takeoffs and landings (normal, crosswind, soft- and short-field); however, fewer were evaluated on forward slip to a landing and go-around/rejected landings.

One important finding was that 11% of the pilots indicated that they were not adequately prepared for some parts of their practical test. More troubling was the fact that 11% of pilots reported that they performed a maneuver that failed to conform to the PTS. Further, 86% of these pilots indicated that the error was noted by the examiner. Perhaps this was a maneuver that they were performing during a second session to complete their practical test, and they were not given a "pink slip" by the examiner during the first performance and answered our survey as if they had never "failed" a practical test. When asked, all of the pilots indicated that they had not previously failed a P-ASEL practical test. On the other hand, within the provided list of technical areas covered during their practical test, some pilots did indicate that they were asked to repeat a maneuver or subject area, and from their explanation, it appeared that poor or marginal performance was a factor.

OVERALL DISCUSSION

As previously stated, creating and maintaining a safe National Airspace System is the direct charge of the FAA. Safeguards are in place to ensure that pilots have the most complete training and are appropriately certificated prior to earning the privileges of pilot-in-command. Specifically, the FAA has identified certain knowledge areas and maneuvers (PTS areas of operation and tasks) that must be performed satisfactorily by pilots prior to receiving their certificate. DPEs act as representatives of the FAA when they assess the skills of pilots during the required practical test for purposes of issuing pilot certificates and ratings. Based on these findings, DPEs are generally acting in accordance with the specified FAA regulations. Given the high volume of practical test examinations that DPEs deliver, however, ensuring their compliance with the PTS standards is of the highest importance. Many DPEs were positive about the support received from the FAA, particularly with regard to the adequacy of support and the accuracy/clarity of information provided to them. Results from this study also identified a few areas of concern. The use of a written plan of action (POA) by DPEs, for example, is expected by the FAA. However, we found that pilots reported fewer examiners using a POA than that reported by DPEs.

One serious problem identified by these results involves the 25% of examiners who reported providing a second-chance opportunity to repeat a maneuver or

response to a question. Pilots also reported receiving second-chance opportunities to repeat maneuvers, and 11% of pilots reported actually failing to properly perform a maneuver. While explanations were provided by both examiners and pilots regarding why pilots were allowed to repeat a maneuver during the practical test, many of those explanations indicated marginal or poor performance as the primary reason. Holding pilots to the standards required by the PTS is the only means to ensure that applicants meet the regulatory requirements for a pilot certificate or rating they are seeking. The PTS defines satisfactory performance as mastery of each task with successful performance assured for each task. These satisfactory performance criteria are in addition to pilots using sound judgment and performing within the established minimums. Providing pilots with multiple opportunities to perform maneuvers due to poor performance is contrary to the PTS and is detrimental to aviation safety. It goes without saying that allowing pilots to fail a maneuver but still pass the practical exam is unacceptable, and given that a large majority of pilots indicated that the examiner *noted* the poor performance, this finding is particularly troublesome.

Adherence to the standards requires that if an applicant fails a task, the entire test is failed, and the examiner is required to issue a notice of disapproval. However, if an applicant should perform a task unsatisfactorily, he/she has the opportunity to continue testing on the remaining untested tasks. Even though the test is failed, the applicant will get credit for the tasks performed satisfactorily. Applicants are then required to receive training from an authorized instructor who then determines that the applicant is proficient to pass the test and is prepared to apply for a retest. During the retest, the applicant will be required, at a minimum, to satisfactorily demonstrate the failed item(s) and other untested tasks (FAA, 2002).

We should not forget, however, that there are legitimate cases for providing another opportunity to determine if the applicant successfully met the standards for performing a maneuver (e.g., when the examiner is uncertain of the outcome or the event being evaluated was interrupted). As mandated in the PTS, second opportunities are not allowed for the purpose of instructing or repeating due to poor performance, but rather to be fair and ensure the applicant the opportunity to complete the maneuver (FAA, 2002).

One consideration for improving DPE performance and adherence to the standards concerns the PTS. As noted, there are minimum requirements or standards that must be met regarding the various flight maneuvers in order to pass an examination. Failure to meet minimum requirements shall result in a disapproval notice, or "pink" slip. However, the methodology for determining whether an applicant's performance is satisfactory or unsatisfactory is subjective. This is, in large part, because of the guidance in the Introduction to the Practical Test Standards. For instance, some of the typical areas listed in the PTS of unsatisfactory performance and grounds for disqualification are: "consistently exceeding the tolerances stated in the (PTS) objectives," and "failure to take prompt corrective action when tolerances are exceeded." Some examiners (and FAA inspectors) are left wondering about how often and by how much applicants can exceed the PTS tolerances. How many times is *consistent* - more than once or several times? Do these statements apply to each maneuver separately or to multiple maneuvers? What is "prompt corrective action?" Unfortunately, the subjective nature of these criteria may contribute to non-standardized application of the PTS by examiners and FAA inspectors, alike.

When pilots were asked to comment upon their preparation for the practical test, they were generally positive about their preparation for the flight portion of the exam, with 94% indicating they felt adequately prepared. However, only 76% reported feeling adequately prepared for the oral portion of the exam. This was echoed by the DPEs, only 34% of whom reported that students were prepared to a considerable or great extent for the oral portion of the exam. While the responsibility for this is shared between instructor and student, as a student, it is difficult to be aware of what you don't know, and certainly it is the job of instructors to prepare students for the practical tests. Nonetheless, the PTS indicates the many areas that can be covered during the practical test and allows the examiner discretion for special areas of emphasis. Student pilots have the responsibility of ensuring they are prepared for all possible areas that can be tested. Smith (2006) noted the many responsibilities of students for a successful checkride. These include making sure they have the knowledge and adequate preparation for the exam, having their paperwork complete, and being ready for distractions during their test. One method of ensuring preparedness is to have a practice checkride or progress check (Davisson, 2006; Smith, 2006). The best way to see how well one can perform a task under scrutiny is to mirror that situation with as much realism as possible. Many flight schools practice this with stage checks throughout a student's training. This method has many advantages and is considered a best practice.

Results of this study highlight some areas of the practical test examination process that are working and some areas that need improvement from the flight training industry (i.e., Part 141 schools, instructors), the examiner population, and the FAA. The results clearly point to the need for better student preparation for the oral portion of the practical test. In addition, scenario-based flight

training and phase checking are considered best practices for private pilot training.

The benefits of the biennial standardization course and the FSDO annual meetings have not been realized, according to DPEs. Flight Standards is working to improve DPE courses and annual meetings to make them more relevant and meaningful. We recommend that Flight Standards also incorporate into these courses greater emphasis on areas of weakness identified in this study, such as communicating DPE use of a POA to applicants, providing feedback (both positive and negative) to instructors, testing all required maneuvers and areas, and not allowing a poorly answered question or poorly performed maneuver to be repeated.

Finally, it is clear that the PTS could be improved by replacing vague or subjective terms with objective metrics for performance. For example, many pilots indicated they were not prepared for turning stalls. As the PTS currently reads, it does not appear that this maneuver is explicitly required, although it does provide criteria regarding the maximum bank angle allowed. However, if DPEs are authorized to test this maneuver, students should be prepared to perform it.

Reducing GA accidents is a high priority of the FAA. Ensuring that pilot applicants receive complete practical examinations that are in full compliance with the PTS is one of the many safeguards in place to maintain GA safety. A multi-level approach aimed at reducing GA accidents includes improved DPE oversight, enhanced scenario-based flight training, and working to achieve consistent proficiency and competency across pilots. This approach will require a concerted effort within the flight training industry, the examiner population, and FAA's Flight Standards Divisions.

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Appendix A: 2005 Designated Pilot Examiners (DPE) Survey

This questionnaire is being administered to all Designated Pilot Examiners (DPEs) who provide practical tests for the Private Pilot Airplane Single-Engine Land (ASEL) category and class rating.

1. How long have you been an FAA Designated Pilot Examiner (DPE)?

   ○ Less than 1 year ○ 1-5 years ○ 6-10 years ○ 11-15 years ○ More than 15 years

2. Have you ever been an FAA Aviation Safety Operations Inspector?

   ○ Yes ○ No (if no, skip to item 3)

   If yes, were you ever assigned to observe, renew, or reinstate DPEs?

   ○ Yes ○ No

3. Approximately, how many Private Pilot Airplane Single-Engine Land (ASEL) practical tests did you conduct during the past 12 months? ⌊___⌋ tests

4. Approximately, how many of the Private Pilot ASEL practical tests you conducted during the past 12 months were first-time Private Pilot ASEL practical tests? ⌊___⌋ tests

5. Of the first-time Private Pilot ASEL applicants that you tested in the past 12 months, approximately what percentage passed?

   ○ None ○ 31-40% ○ 71-80%
   ○ 1-10% ○ 41-50% ○ 81-90%
   ○ 11-20% ○ 51-60% ○ 91-100%
   ○ 21-30% ○ 61-70%

6. Approximately, how many of the Private Pilot ASEL practical tests you conducted during the past 12 months were re-tests? ⌊___⌋ re-tests

7. How much time do you typically spend administering the flight portion of a first-time Private Pilot ASEL practical test?

   ○ Less than 30 min ○ >2 to 2½ hrs
   ○ 30 min. to 1 hr ○ >2½ to 3 hrs
   ○ >1 to 1½ hrs ○ More than 3 hrs
   ○ >1½ to 2 hrs

8. How much time do you typically spend administering the oral (ground) portion of a first-time Private Pilot ASEL practical test?

   ○ Less than 30 min ○ >2 to 2½ hrs
   ○ 30 min. to 1 hr ○ >2½ to 3 hrs
   ○ >1 to 1½ hrs ○ More than 3 hrs
   ○ >1½ to 2 hrs

9. Approximately, what percentage of your first-time Private Pilot ASEL applicants perform unsatisfactorily during the oral (ground) portion of the practical test?

   ○ None ○ 31-40% ○ 71-80%
   ○ 1-10% ○ 41-50% ○ 81-90%
   ○ 11-20% ○ 51-60% ○ 91-100%
   ○ 21-30% ○ 61-70%

10. Approximately, what percentage of your first-time Private Pilot ASEL applicants perform unsatisfactorily during the flight portion of the practical test?

    ○ None ○ 31-40% ○ 71-80%
    ○ 1-10% ○ 41-50% ○ 81-90%
    ○ 11-20% ○ 51-60% ○ 91-100%
    ○ 21-30% ○ 61-70%

11. Have you ever provided a Private Pilot ASEL applicant with a second-chance opportunity to perform a specific task or maneuver, because the applicant's performance during the first opportunity was unsatisfactory?

    O Yes O No (if no, skip to item 12)

    If yes, please explain. _____

12. Do you use a written plan of action (POA) when conducting a practical test for the Private Pilot ASEL rating?

    O Yes O No (if no, skip to item 15)

13. Do you use variations of your written POA for each first-time Private Pilot ASEL applicant?

    O Yes O No O NA – do not use a written POA

14. Do you use variations of your written POA for Private Pilot ASEL re-tests?

    O Yes O No O NA – do not use a written POA

15. In the past 24 months, how many times have you been observed by a Principal Operations Inspector (POI) while you were conducting a Private Pilot ASEL practical test (oral or flight portions)?

    O None (if none, skip to item 18) O 1 O 2 O 3 O 4 O 5

16. In the past 24 months, have you been observed by a POI while you were conducting the flight portion of a Private Pilot ASEL practical test?

    O Yes O No O NA – not observed by a POI

17. In the past 24 months, have you been observed by a POI while you were conducting the oral (ground) portion of a Private Pilot ASEL practical test?

    O Yes O No O NA – not observed by a POI

18. Has a POI ever acted as a Private Pilot ASEL "applicant" for the purpose of assessing your examiner proficiency?

    O Yes O No

19. Has a POI ever tested you on selected flight maneuvers for the purpose of assessing your Private Pilot examiner proficiency?

    O Yes O No

20. Has a POI ever made an "unsatisfactory" finding regarding your duties, responsibilities, or performance as a Private Pilot ASEL DPE?

    O Yes O No (if no, skip to item 23)

21. If you answered yes to item 20, were you required to take any remedial training or other corrective action?

    O Yes O No (if no, skip to item 23)

    If yes, please explain the remedial training or other corrective action. _____

    _____

22. If you answered yes to item 21, were your testing privileges suspended until the remedial or other corrective action was completed?

    O Yes O No

23. The POI's are professional and courteous while conducting observations.

Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	No experience to judge
O	O	O	O	O	O	O

24. Has your pilot examiner designation ever been involuntarily suspended?

O Yes O No

25. Do you maintain flight proficiency for the Private Pilot ASEL rating?

O Yes O No (if no, skip to item 26)

If yes, how many hours annually do you operate as pilot in command? ____ hrs

26. Do you maintain flight proficiency in each make and model of aircraft in which you conduct a Private Pilot ASEL practical test?

O Yes O No

27. What is your usual fee for the administration of a Private Pilot ASEL practical test?

O Less than $200
O $201 to $250
O $251 to $300
O $301 to $350
O $351 to $400
O More than $400

28. What is your usual fee for a Private Pilot ASEL re-test?

O Less than $150
O $151 to $200
O $201 to $250
O $251 to $300
O $301 to $350
O More than $350

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
29. The FSDO to which I report provides me with adequate administrative assistance when I need it.	O	O	O	O	O	O
30. The FSDO to which I report provides me with policy change information in a timely manner.	O	O	O	O	O	O
31. The FSDO to which I report provides me with clear, concise information when I need it.	O	O	O	O	O	O
32. The <u>biennial</u> DPE standardization courses conducted by AFS-600 are beneficial to me as a DPE.	O	O	O	O	O	O
33. The <u>annual</u> DPE meetings conducted by the FSDO to which I report are beneficial to me as a DPE.	O	O	O	O	O	O

	Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
34. To what extent do you feel that instructors are preparing first-time Private Pilot ASEL applicants adequately for the <u>oral (ground) portion</u> of the practical test?	O	O	O	O	O
35. To what extent do you feel that instructors are preparing first-time Private Pilot ASEL applicants adequately for the <u>flight portion</u> of the practical test?	O	O	O	O	O
36. To what extent do you give feedback to the recommending instructor when an applicant <u>fails</u> the practical test?	O	O	O	O	O
37. To what extent do you give feedback to the recommending instructor when an applicant <u>passes</u> the practical test?	O	O	O	O	O

38. Would you be interested in attending an FAA-sponsored standardization course for inspectors/examiners?

O Yes O No

39. Are you an Aviation Safety Counselor?

O Yes O No

Comments: Please use this space to provide any additional comments you may have about topics covered by this survey. All written comments will be transcribed and presented to Flight Standards Service management. Profanity and identifying information such as name and location will be deleted during transcription; however, if the content of your comment identifies you, your confidentiality cannot be assured. Transcribed comments are subject to the Freedom of Information Act (FOIA).

Thank you for your participation.

Appendix B: 2005 Private Pilot ASEL: Assessment of Instruction and Practical Test Experiences

This questionnaire is being administered to all General Aviation pilots who have been recently certified for the Private Pilot Airplane Single-Engine Land (ASEL) category and class rating. You have received this survey as a result of your recent ASEL certification.

1. Were you certified in the previous 3 months for the Private Pilot ASEL category and class rating?

   ○ Yes ○ No (if no, please stop here and return the survey in the envelope provided)

2. If you were ASEL certified in the previous 3 months, please indicate the date of that certification:

   ___ – ___ – ___
   Month Day Year

3. Date completing this survey (today's date):

   ___ – ___ – ___
   Month Day Year

Instructions: The items in this section ask about your experiences with your pilot school or independent flight instructor.

4. How did you obtain your flight training? (If both, **select the one** that provided you the most training and keep it in mind when answering the remaining items in this section.)

   ○ Pilot school
   ○ Independent flight instructor

5. Did you graduate from an FAA-approved Part 141 pilot school?

   ○ Yes ○ No (if no, skip to item 7) ○ Don't know

6. If you are a graduate of an FAA-approved Part 141 pilot school, how did you take your most recent practical test for certification for the Private Pilot ASEL certificate and rating?

   ○ Designated Pilot Examiner (DPE)
   ○ Final phase check by a Part 141 pilot school employee (NOT by a DPE)
   ○ Both DPE and final phase check
   ○ Don't know

7. Did you obtain a copy of the FAA Practical Test Standards (PTS) for the certificate or rating for which you trained?

   ○ Yes ○ No (if no, skip to item 12) ○ Don't know

8. When did you obtain a copy of the FAA PTS?

   ○ Before or early in training
   ○ About half-way through training
   ○ Latter part of training
   ○ After training

9. Did you review the PTS to obtain a complete understanding of the requirements for your practical test?

   ○ Yes ○ No ○ Don't know

10. Did you use the PTS to judge your performance of the required flight maneuvers?

    ○ Yes ○ No ○ Don't know

11. Did you use the PTS to determine the knowledge required for your oral (ground) examination?

    ○ Yes ○ No ○ Don't know

12. Did your instructor(s) use the standards required by the PTS to measure your flight training performance?

    ○ Yes ○ No ○ Don't know

13. To what extent do you feel that your instructor(s) prepared you adequately for the oral (ground) and flight portions of the practical test?

Oral (Ground) Test:

Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
O	O	O	O	O

Flight Test:

Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
O	O	O	O	O

14. In preparation for your practical test, did your flight instructor advise you that the pilot examiner would assess runway incursion avoidance?

O Yes O No O Don't Know

15. During your training did your instructor(s) emphasize the importance of effective visual scanning/collision avoidance procedures?

O Yes O No O Don't Know

16. On the scale below, please rate the quality of your flight instruction.

Not acceptable									Extremely well done
O	O	O	O	O	O	O	O	O	O

Instructions: The items in this section ask about your experiences with the examiner who administered the oral (ground) and flight portions of your most recent practical test. Your most recent practical test refers to all testing sessions that you may have completed with an examiner for your Private Pilot Airplane Single-Engine Land (ASEL) category and class rating.

17. To what extent was the examiner who conducted your practical test prepared and organized to conduct the test when you arrived?

Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
O	O	O	O	O

18. To what extent was the oral (ground) portion of the practical test conducted in a place that was free of distractions?

Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
O	O	O	O	O

19. To what extent did the examiner **use** a prepared, **written** plan in the conduct of the oral (ground) and flight portions of the practical test?

Not at all	To a limited extent	To a moderate extent	To a considerable extent	To a great extent
O	O	O	O	O

20. If you received a **briefing** from your examiner prior to the flight portion of the practical test, which of the following areas were covered? [Mark all that apply.]

- O Procedures for **positive exchange** of flight controls (who is flying the aircraft)
- O Procedures for an **actual in-flight** emergency
- O Method(s) used by the examiner to **simulate emergencies**
- O **Repetition** of maneuvers
- O **Satisfactory** performance criteria
- O **Unsatisfactory** performance criteria
- O I did **not** receive a briefing prior to the flight portion of the practical test
- O Don't know

21. Please indicate the **subject areas** that were **evaluated** by your examiner. [Mark all that apply.]

- ○ Stall/Spin Awareness
- ○ Wake Turbulence Avoidance
- ○ Positive Aircraft Control
- ○ Controlled Flight Into Terrain (CFIT)
- ○ Checklist Usage
- ○ Aeronautical Decision Making (ADM)
- ○ Low Level Wind Shear
- ○ Land and Hold Short Operations (LAHSO)
- ○ Collision Avoidance on the Ground (Runway Incursion Avoidance)
- ○ In-flight Collision Avoidance
- ○ Don't know

22. Please indicate the events for which you utilized a checklist. [Mark all that apply.]

- ○ Preflight inspection
- ○ Engine starting
- ○ Before takeoff check
- ○ Takeoff and climb
- ○ Cruise flight
- ○ Descent
- ○ Approach and landing
- ○ Go-around
- ○ Emergency approach and landing
- ○ After landing
- ○ Engine shutdown

23. Prior to your flight, did you present any portion of (or a copy of) the maintenance logbook for the aircraft you used during the practical test?

○ Yes ○ No (if no, skip to item 25)

24. Did the examiner ask you to explain the maintenance logbook entries for the aircraft you used during the practical test?

○ Yes ○ No

25. Did the examiner ask any maintenance or aircraft airworthiness questions?

○ Yes ○ No ○ Don't know

26. How much time did you spend on the flight portion of the practical test?

- ○ Less than 30 min.
- ○ 30 min. to less than 1 hr.
- ○ 1 to less than 1½ hrs.
- ○ 1½ to less than 2 hrs.
- ○ 2 to less than 2½ hrs.
- ○ 2½ to less than 3 hrs.
- ○ More than 3 hrs.

27. How much time did you spend on the oral (ground) portion of the practical test prior to the flight portion?

- ○ Less than 30 min.
- ○ 30 min. to less than 1 hr.
- ○ 1 to less than 1½ hrs.
- ○ 1½ to less than 2 hrs.
- ○ 2 to less than 2½ hrs.
- ○ 2½ to less than 3 hrs.
- ○ More than 3 hrs.

28. Did an <u>actual</u> distraction occur during a **taxi, departure, or arrival** phase of the flight?

○ Yes (if yes, skip to item 31) ○ No ○ I did not detect an actual distraction

29. Did the examiner <u>provide</u> a distraction during a **taxi, departure, or arrival** phase of the flight?

○ Yes ○ No (if no, skip to item 31) ○ I did not detect a distraction (if did not detect, skip to item 31)

30. If the examiner provided a distraction, to what extent was the distraction realistic?

○ Not at all	○ To a limited extent	○ To a moderate extent	○ To a considerable extent	○ To a great extent

31. Did the examiner require a procedure that jeopardized safety?

○ Yes ○ No ○ Don't know

a. If yes, please explain. _____

32. Did the examiner ask you to make a "go/no-go" decision based on available weather information?

○ Yes ○ No

33. On your most recent practical test, how many landings to a touch down did you demonstrate?

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ More than 6

Appendix B: 2005 Private Pilot ASEL: Assessment of Instruction and Practical Test Experiences

Instructions: This section contains a list of technical subject areas, maneuvers, and procedures (events).

Please indicate all events the examiner asked you to explain and/or demonstrate during your most recent practical test. Your most recent practical test refers to all testing sessions that you may have completed with an examiner for your Private Pilot ASEL category and class rating. Also, please identify whether or not you were asked to repeat any maneuver or procedure. Additionally, if you were asked to repeat an event, please provide the reason the examiner gave for the request to repeat the event.

Technical Subject Areas, Maneuvers, and Procedures (Event)	Was the event evaluated?			Were you asked to repeat the event?		Examiner's reason for the request to repeat the event
Preflight Preparation	Yes	No	Don't know	Yes	No	
a. Certificates and Documents	○	○	○	○	○	a. _____
b. Airworthiness Requirements	○	○	○	○	○	b. _____
c. Weather Information	○	○	○	○	○	c. _____
d. Cross-country Flight Planning	○	○	○	○	○	d. _____
e. Basic VFR Weather Minimums	○	○	○	○	○	e. _____
f. Airspace Classes	○	○	○	○	○	f. _____
g. Special Use and Other Airspace Areas	○	○	○	○	○	g. _____
h. Performance and Limitations	○	○	○	○	○	h. _____
i. Weight and Balance	○	○	○	○	○	i. _____
j. Operation of Systems	○	○	○	○	○	j. _____
k. Minimum Equipment List	○	○	○	○	○	k. _____
l. Aeromedical Factors	○	○	○	○	○	l. _____
Preflight Procedures						
a. Preflight Inspection	○	○	○	○	○	a. _____
b. Cockpit Management	○	○	○	○	○	b. _____
c. Engine Starting	○	○	○	○	○	c. _____
d. Taxiing	○	○	○	○	○	d. _____
e. Before Takeoff Check	○	○	○	○	○	e. _____
Airport Operations						
a. Radio Communications and ATC Light Signals	○	○	○	○	○	a. _____
b. Traffic Patterns	○	○	○	○	○	b. _____
c. Airport, Runway and Taxiway Signs, Markings, and Lighting	○	○	○	○	○	c. _____
Takeoffs, Landings, and Go-Arounds						
a. Normal and Crosswind Takeoff and Climb	○	○	○	○	○	a. _____
b. Normal and Crosswind Approach and Landing	○	○	○	○	○	b. _____
c. Soft-field Takeoff and Climb	○	○	○	○	○	c. _____
d. Soft-field Approach and Landing	○	○	○	○	○	d. _____
e. Short-field Takeoff and Maximum Performance Climb	○	○	○	○	○	e. _____
f. Short-field Approach and Landing	○	○	○	○	○	f. _____
g. Forward Slip to a Landing	○	○	○	○	○	g. _____
h. Go-around/Rejected Landing	○	○	○	○	○	h. _____

Technical Subject Areas, Maneuvers, and Procedures (Event)	Was the event evaluated?			Were you asked to repeat the event?		Examiner's reason for the request to repeat the event
Performance Maneuver	Yes	No	Don't know	Yes	No	
a. Steep Turns	○	○	○	○	○	a. _____
Ground Reference Maneuvers						
a. Rectangular Course	○	○	○	○	○	a. _____
b. S-Turns	○	○	○	○	○	b. _____
c. Turns Around a Point	○	○	○	○	○	c. _____
Navigation						
a. Pilotage and Dead Reckoning	○	○	○	○	○	a. _____
b. Navigation Systems and Radar Services	○	○	○	○	○	b. _____
c. Diversion	○	○	○	○	○	c. _____
d. Lost Procedures	○	○	○	○	○	d. _____
Slow Flight and Stalls						
a. Maneuvering During Slow Flight	○	○	○	○	○	a. _____
b. Power-off Stalls	○	○	○	○	○	b. _____
c. Power-on Stalls	○	○	○	○	○	c. _____
d. Spin Awareness	○	○	○	○	○	d. _____
Maneuvers/Procedures in Simulated Instrument Conditions						
a. Straight -and- Level Flight	○	○	○	○	○	a. _____
b. Constant Airspeed Climbs	○	○	○	○	○	b. _____
c. Constant Airspeed Descents	○	○	○	○	○	c. _____
d. Turns to Headings	○	○	○	○	○	d. _____
e. Recovery from Unusual Flight Attitudes	○	○	○	○	○	e. _____
f. Radio Communications, Navigation Systems/Facilities, and Radar Services	○	○	○	○	○	f. _____
Emergency Operations						
a. Emergency Approach and Landing	○	○	○	○	○	a. _____
b. Systems and Equipment Malfunctions	○	○	○	○	○	b. _____
c. Emergency Equipment and Survival Gear	○	○	○	○	○	c. _____
Night Operation						
a. Night Preparation	○	○	○	○	○	a. _____
Postflight Procedures						
a. After Landing	○	○	○	○	○	a. _____
b. Parking and Securing	○	○	○	○	○	b. _____

Instructions: Your most recent practical test refers to all testing sessions that you may have completed with an examiner for your ASEL category and class rating.

34. On your most recent practical test, did you demonstrate a crosswind takeoff?

    O Yes (if yes, skip to item 36) O No

35. If you did **not** demonstrate a crosswind takeoff, did the examiner evaluate your knowledge of crosswind takeoffs through oral testing?

    O Yes O No

36. On your most recent practical test, did you demonstrate a crosswind landing?

    O Yes (if yes, skip to item 38) O No

37. If you did **not** demonstrate a crosswind landing, did the examiner evaluate your knowledge of crosswind landings through oral testing?

    O Yes O No

38. On your most recent practical test, did the examiner ask you to perform any maneuver(s) or procedure(s) or to explain any technical subject area(s) for which you had not been adequately prepared by your instructor(s)?

    O Yes O No

    a. If yes, please explain. _____

39. Which of the following most accurately describes your most recent practical test for the Private Pilot ASEL category and class rating?

    O A complete test (not interrupted by weather, maintenance, illness, etc.)
    O A partial test (continuance due to an interruption by weather, maintenance, illness, etc.)
    O A re-test

40. Have you ever failed a practical test for the Private Pilot ASEL category and class rating?

    O Yes O No (if no, skip to item 41)

    a. If yes, did you receive a disapproval notice or "pink" slip?

    O Yes O No

    b. If you did not receive a disapproval notice or "pink" slip, please explain.

    _____

41. Have you ever been directed by an examiner to seek further instruction and return at a later date to complete the practical test for the Private Pilot ASEL category and class rating?

    O Yes O No (if no, skip to item 42)

    a. If yes, did you receive a disapproval notice or "pink" slip?

    O Yes O No

    b. If you did not receive a disapproval notice or "pink" slip, please explain.

    _____

42. On your most recent practical test, did you perform any maneuver that failed to conform to the requirements of the Private Pilot Practical Test Standards?

    O Yes O No O Don't know

    a. If yes, was the error noted by the examiner?

    O Yes O No O Don't know

43. What was the fee you paid for your initial Private Pilot Practical Test for your ASEL category and class rating?

O $150 or less O $151 to $250 O $251 to $350 O $351 or more

44. If you failed your initial Private Pilot Practical Test for your ASEL category and class rating, what was the fee you paid for a re-test?

O $100 or less O $101 to $150 O $151 to $200 O $201 or more

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45. Are you:

O Male O Female

46. How old are you?

O 25 or Under O 26 to 35 O 36 to 45 O 46 to 55 O 56 to 65 O 66 or older

The following is presented in accordance with the guidance published by the Office of Management and Budget (OMB) for Federal organizations collecting or presenting data on race and ethnicity for statistical purposes and program administrative reporting.

47. Indicate your race or ethnicity. (Mark one or more.)

- O **American Indian or Alaska Native.** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- O **Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- O **Black or African American.** A person having origins in any of the black racial groups of Africa.
- O **Hispanic, Latino, or of Spanish Origin.** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- O **Native Hawaiian or Other Pacific Islander.** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- O **White**. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Thank you for your participation!

Please return your completed survey to:

FAA Civil Aerospace Medical Institute (CAMI)
Training and Organizational Research, AAM-520
PO Box 25082
Oklahoma City, OK 73125