

Introducing the ACS

Airman Certification Standards



Federal Aviation
Administration

Presented by: FAA Flight Standards Service
Date: January 2015



Welcome to this introduction to the Airman Certification Standards, or ACS, concept. This presentation has two goals.

- First is to provide basic information on a new, industry-developed Airman Certification Standards framework that will eventually replace the Practical Test Standards.
- Second is to offer an opportunity to provide comments and ask questions while the ACS project is still in the development and testing phase. At the end of this presentation is a slide listing FAA Headquarters contact information and additional sources of information on this project.

Airman Certification Requirements

- For each airman certificate or rating, 14 CFR lists required areas of *aeronautical knowledge* and *flight proficiency*.
 - FAA developed the PTS to provide practical test performance metrics for flight proficiency in each Area of Operation and Task.
 - In addition, each PTS now includes a lengthy list of largely undefined “special emphasis” areas.
 - There has never been a corresponding set of defined “KTS” (knowledge test standards) metrics for the aeronautical knowledge elements tested via “the written” exam.



First, let's talk about why the ACS project got started.

- As you know, 14 CFR lists required areas of *aeronautical knowledge* and *flight proficiency* for each pilot or instructor certificate and rating.
- Years ago, the FAA developed the Practical Test Standards (PTS) to provide practical test performance metrics for flight proficiency in each Area of Operation and Task.
- The PTS replaced the previous “flight test guides,” with the goal of ensuring a standardized approach to the practical test.
- The PTS is still a very solid and sound approach. Over time, though, the PTS has acquired a number of “barnacles” – things like overlapping or redundant tasks, and a long and growing list of largely undefined “special emphasis” items in the introductory material.
- There has never been a corresponding set of defined knowledge test standards – KTS -- metrics for the aeronautical knowledge elements tested via “the written” exam.

Rationale for Change

- Lack of a “KTS” has allowed the accumulation of too many FAA knowledge test questions that are:
 - Out-of-date (e.g., lots of NDB, not much RNAV)
 - Overly complex (e.g., multiple interpolations required to calculate a two-knot difference in wind speed or landing distance within three feet (!))
 - Irrelevant (e.g., number of satellites in the GPS constellation)
 - Disconnected from “real” skills and knowledge required for safe operation in today’s NAS.



- The lack of a “KTS” to define and standardize aeronautical knowledge and risk management elements in the way that the PTS defines performance metrics for flight proficiency has created the situation we have today.
- The FAA knowledge test has been criticized for including too many questions that are:
 - Out-of-date (e.g., lots of NDB questions, but not many RNAV)
 - Overly complicated (e.g., questions requiring multiple interpolations to calculate very small values, such as a two-knot difference in wind speed or landing distance within three feet (!))
 - Irrelevant (e.g., questions on the number of satellites in the GPS constellation)
 - Disconnected from the “real” skills and knowledge required for safe operation in today’s National Airspace System (NAS).

From PTS to ACS

- In 2012, an FAA-chartered Aviation Rulemaking Committee (ARC) proposed the ACS approach.
- **Airman Certification Standards**
 - “Enhanced” version of the PTS
 - Adds task-specific knowledge and risk management elements to each PTS Area of Operation and Task.
 - Result = holistic, integrated presentation of specific knowledge, skills, and risk management elements and performance metrics for each Area of Operation and Task.



- To address these issues, the FAA wanted to get input from a diverse group of aviation community experts in aviation training and testing.
- So – in 2011, the FAA chartered an Aviation Rulemaking Committee (ARC) to look at the situation and make recommendations on how the FAA could improve its approach to knowledge testing, and thus improve the way industry prepares and uses aviation training materials.
- The members of the Aviation Rulemaking Committee included AOPA, SAFE, NAFI, GAMA, NATA, Jeppesen, Sporty’s, Gleim, King Schools, ASA, Redbird, Cessna, Aviation Accreditation Board International (AABI), University Aviation Association (UAA), and others. The ARC submitted its recommendations to the FAA in 2012.
- The heart of the ARC’s proposal was for the FAA to consider adopting and transitioning to the Airman Certification Standards (ACS) approach.
- Key points:
 - The ACS is essentially an “enhanced” version of the PTS.
 - It adds task-specific knowledge and risk management elements to each PTS Area of Operation and Task.
 - The result is a holistic, integrated presentation of specific knowledge, skills, and risk management elements and performance metrics for each Area of Operation and Task.

What is

Private Pilot – Airplane Airman Certification Standards
Airplane—Single Engine, Multi Engine Land and Sea Areas of Operation

V. Performance Maneuvers

Task	A. Steep Turns	
Reference	FAA-H-8083-2, FAA-H-8083-3, POH/AFM	
Objective	To determine that the applicant exhibits satisfactory knowledge, skills and risk management associated with steep turns.	
Knowledge	The applicant demonstrates understanding of:	
	1. Coordinated flight.	PAV.A.K1
	2. Attitude control at various airspeeds.	PAV.A.K2
	3. Maneuvering speed, including changes in weight.	PAV.A.K3
	4. Controlling rate and radius of turn.	PAV.A.K4
	5. Accelerated stalls.	PAV.A.K5
	6. Overbanking tendencies.	PAV.A.K6
	7. Use of trim in a turn.	PAV.A.K7
	8. Aerodynamics associated with steep turns.	PAV.A.K8
9. Aerobatic requirements and limitations.	PAV.A.K9	
Skills	The applicant demonstrates the ability to:	
	1. Establish the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed V_A .	PAV.A.S1
	2. Rolls into a coordinated 360° steep turn with at least a 45° bank, followed immediately by a 360° steep turn in the opposite direction.	PAV.A.S2
	3. Perform the task in the opposite direction, as specified by the evaluator.	PAV.A.S3
4. Maintain the entry altitude, ±100 feet, airspeed, ±10 knots, bank, and ±5°, and roll out on the entry heading, ±10°.	PAV.A.S4	
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:	
	1. Dividing attention between airplane control and orientation.	PAV.A.R1
	2. Task management.	PAV.A.R2
	3. Energy management.	PAV.A.R3
	4. Stall/spin awareness.	PAV.A.R4
	5. Situational awareness.	PAV.A.R5
6. Collision avoidance to include clearing the area.	PAV.A.R6	

ACS

PTS



Here's what it looks like on the current draft Airman Certification Standards document for Private Pilot Airplane.

- The “skills” section of the ACS covers the flight proficiency performance metrics in today's PTS.
- For each PTS Area of Operation/Task, the ACS lists the elements of aeronautical knowledge that support that skill.
- In addition, for each PTS Area of Operation/Task, the ACS lists the risk management elements or behaviors associated with it.

What is the ACS?

Private Pilot – Airplane Airman Certification Standards
Airplane—Single Engine, Multi Engine Land and Sea Areas of Operation

V. Performance Maneuvers

Task	A. Steep Turns	
Reference	FAA-H-8083-2, FAA-H-8083-3, POH/AFM	
Objective	To determine that the applicant exhibits satisfactory knowledge, skills and risk management associated with steep turns.	
Knowledge	The applicant demonstrates understanding of:	
	1. Coordinated flight.	PA.V.A.K1
	2. Altitude control at various airspeeds.	PA.V.A.K2
	3. Maneuvering speed, including changes in weight.	PA.V.A.K3
	4. Controlling rate and radius of turn.	PA.V.A.K4
	5. Accelerated stalls.	PA.V.A.K5
	6. Overbanking tendencies.	PA.V.A.K6
	7. Use of trim in a turn.	PA.V.A.K7
	8. Aerodynamics associated with steep turns.	PA.V.A.K8
9. Aerobic requirements and limitations.	PA.V.A.K9	
Skills	The applicant demonstrates the ability to:	
	1. Establish the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed V _A .	PA.V.A.S1
	2. Rolls into a coordinated 360° steep turn with at least a 45° bank, followed immediately by a 360° steep turn in the opposite direction.	PA.V.A.S2
	3. Perform the task in the opposite direction, as specified by the evaluator.	PA.V.A.S3
4. Maintain the entry altitude, ±100 feet, airspeed, ±10 knots, bank, and ±5°; and roll out on the entry heading, ±10°.	PA.V.A.S4	
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:	
	1. Dividing attention between airplane control and orientation.	PA.V.A.R1
	2. Task management.	PA.V.A.R2
	3. Energy management.	PA.V.A.R3
	4. Stall/spin awareness.	PA.V.A.R4
	5. Situational awareness.	PA.V.A.R5
6. Collision avoidance to include clearing the area.	PA.V.A.R6	

Aeronautical knowledge

Flight proficiency

Aeronautical decision-making and special emphasis

Airman Certification Standards
Winter 2015



Federal Aviation
Administration

6

The integrated ACS presentation helps applicants, instructors, and evaluators understand how knowledge, skills, and risk management are connected for any given Area of Operation/Task.

Another benefit comes from defining some of the terms and concepts now presented in a list of “special emphasis” items in the PTS introduction, and placing them in the right context.

The presentation of risk management enhances safety, and it can also contribute to much greater standardization in teaching and testing these concepts. This outcome benefits applicants, instructors, and evaluators.

What is the ACS?

Private Pilot – Airplane Airman Certification Standards
Airplane—Single Engine, Multi Engine Land and Sea Areas of Operation

V. Performance Maneuvers

Task	A. Steep Turns	
Reference	FAA-H-8083-2, FAA-H-8083-3, POH/AFM	
Objective	To determine that the applicant exhibits satisfactory knowledge, skills and risk management associated with steep turns.	
Knowledge	The applicant demonstrates understanding of:	
	1. Coordinated flight.	PA.V.A.K1
	2. Attitude control at various airspeeds.	PA.V.A.K2
	3. Maneuvering speed, including changes in weight.	PA.V.A.K3
	4. Controlling rate and radius of turn.	PA.V.A.K4
	5. Accelerated stalls.	PA.V.A.K5
	6. Overbanking tendencies.	PA.V.A.K6
	7. Use of trim in a turn.	PA.V.A.K7
	8. Aerodynamics associated with steep turns.	PA.V.A.K8
	9. Aerobic requirements and limitations.	PA.V.A.K9
Skills	The applicant demonstrates the ability to:	
	1. Establish the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed V_A .	PA.V.A.S1
	2. Rolls into a coordinated 360° steep turn with at least a 45° bank, followed immediately by a 360° steep turn in the opposite direction.	PA.V.A.S2
	3. Perform the task in the opposite direction, as specified by the evaluator.	PA.V.A.S3
	4. Maintain the entry altitude, ± 100 feet, airspeed, ± 10 knots, bank, and $\pm 5^\circ$, and roll out on the entry heading, $\pm 10^\circ$.	PA.V.A.S4
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:	
	1. Dividing attention between airplane control and orientation.	PA.V.A.R1
	2. Task management.	PA.V.A.R2
	3. Energy management.	PA.V.A.R3
	4. Stall/spin awareness.	PA.V.A.R4
	5. Situational awareness.	PA.V.A.R5
	6. Collision avoidance to include clearing the area.	PA.V.A.R6

- ACS also includes unique codes for each element of knowledge, skill, and risk management.

PA = Private Pilot Airplane (*defines applicable ACS*)

V = Performance Maneuvers (*defines Area of Operation*)

A = Steep Turns (*defines Task*)

K5 = Accelerated Stalls (*defines element*)

Airman Certification Standards
Winter 2015



Federal Aviation
Administration

7

- One of the strongest tools that the industry team developed for the Airman Certification Standards framework is a new coding system.
- As you can see on the slide, the ACS assigns a unique and very intuitive code to each element of knowledge, skill, and risk management.
- Let's take a look at what PA.V.A.K5 means:
 - PA** = Private Pilot Airplane (*defines applicable ACS*)
 - V** = Performance Maneuvers (*defines Area of Operation*)
 - A** = Steep Turns (*defines Task*)
 - K5** = Accelerated Stalls (*defines element*)

What is the ACS?

Private Pilot – Airplane Airman Certification Standards
Airplane—Single Engine, Multi Engine Land and Sea Areas of Operation

- ACS codes will replace Learning Statement Codes (LSCs).
- ACS codes are anchored in the *standard*, not in references like LSCs.
- ACS codes enable FAA to align standards to handbooks and test questions, to maintain that alignment, and to develop better test questions.
- ACS codes provide sharper, more focused feedback to applicants, instructors, and evaluators.

V. Performance Maneuvers

Task	A. Steep Turns	
Reference	FAA-H-8083-2, FAA-H-8083-3; POH/AFM	
Objective	To determine that the applicant exhibits satisfactory knowledge, skills and risk management associated with steep turns.	
Knowledge	The applicant demonstrates understanding of:	
	1. Coordinated flight.	PA.V.A.K1
	2. Attitude control at various airspeeds.	PA.V.A.K2
	3. Maneuvering speed, including changes in weight.	PA.V.A.K3
	4. Controlling rate and radius of turn.	PA.V.A.K4
	5. Accelerated stalls.	PA.V.A.K5
	6. Overbanking tendencies.	PA.V.A.K6
	7. Use of trim in a turn.	PA.V.A.K7
	8. Aerodynamics associated with steep turns.	PA.V.A.K8
9. Aerobic requirements and limitations.	PA.V.A.K9	
Skills	The applicant demonstrates the ability to:	
	1. Establish the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed V_A .	PA.V.A.S1
	2. Rolls into a coordinated 360° steep turn with at least a 45° bank, followed immediately by a 360° steep turn in the opposite direction.	PA.V.A.S2
	3. Perform the task in the opposite direction, as specified by the evaluator.	PA.V.A.S3
4. Maintain the entry altitude, ± 100 feet, airspeed, ± 10 knots, bank, and $\pm 5^\circ$, and roll out on the entry heading, $\pm 10^\circ$.	PA.V.A.S4	
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:	
	1. Dividing attention between airplane control and orientation.	PA.V.A.R1
	2. Task management.	PA.V.A.R2
	3. Energy management.	PA.V.A.R3
	4. Stall/spin awareness.	PA.V.A.R4
	5. Situational awareness.	PA.V.A.R5
6. Collision avoidance to include clearing the area.	PA.V.A.R6	

Airman Certification Standards
Winter 2015



Federal Aviation
Administration

8

- When the Airman Certification Standards approach is implemented, ACS codes will replace the Learning Statement Codes (LSCs) that are used right now.
- The ACS codes have several very strong advantages over the Learning Statement Codes.
- First, the ACS codes are anchored in the standard – not in handbooks and other reference documents, like today's Learning Statement Codes.
- Second, the ACS codes enable the FAA to align standards to handbooks and test questions, to maintain that alignment, and to develop better test questions.
 - A subject matter expert (SME) team consisting of representatives from several headquarters policy divisions is already using the ACS codes to review, revise and – in some cases, eliminate – knowledge test questions.
 - This process will ensure that each knowledge test question has a real purpose, and that it has a clear link to standards and guidance.
- Third, ACS codes provide sharper, more focused feedback to applicants, instructors, and evaluators. The next slide provides a strong visual example of how that will work in the real world.

Code Comparison

Computer Test Report

U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
Airman Knowledge Test Report

NAME: John Doe
APPLICANT ID: 12345678 EXAM ID: 50010220140465201
EXAM: Private Pilot Airplane (PAR) EXAM DATE: 01/02/2014 EXAM SITE: LAS72403
SCORE: 90 GRADE: PASS TAKE: 1

Learning statement codes listed below represent incorrectly answered questions. Learning statement codes and their associated statements can be found at www.faa.gov/training_testing/testing/airmen.

Reference material associated with the learning statement codes can be found in the appropriate knowledge test guide at www.faa.gov/training_testing/testing/airmen/test_guides.

A single code may represent more than one incorrect response.

PLT064 PLT141 PLT077 PLT161 PLT414 PKT163

Computer Test Report

U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
Airman Knowledge Test Report

NAME: John Doe
APPLICANT ID: 12345678 EXAM ID: 50010220140465201
EXAM: Private Pilot Airplane (PAR) EXAM DATE: 01/02/2014 EXAM SITE: LAS72403
SCORE: 90 GRADE: PASS TAKE: 1

Learning statement codes listed below represent incorrectly answered questions. Learning statement codes and their associated statements can be found at www.faa.gov/training_testing/testing/airmen.


Reference material associated with the learning statement codes can be found in the appropriate airman certification standard at www.faa.gov/training_testing/testing/airmen/test_guides.

A single code may represent more than one incorrect response.

PA.I.D.K4 PA.III.A.K3 PA.II.D.K2 PA.I.E.K2 **PA.III.B.K4** PA.I.E.K1

Today's test report lists reference-based LSCs that are often very broad – creates an obstacle to effective remedial training and retesting.

PA = Private Pilot Airplane (Applicable ACS)
III = Airport & Seaplane Base (Area of Operation)
B = Traffic Patterns (Task)
K4 = Right of Way Rules (Element)

Airman Certification Standards Winter 2015  Federal Aviation Administration 9

Here's the example.

- When an applicant finishes the knowledge test today, he or she gets a computer test report that looks like the example on the left. The Learning Statement Codes are on the bottom of the form, and they are intended to show the areas of knowledge the applicant missed on the test.
- To decipher the codes, the applicant, the instructor, and eventually the evaluator have to go to a separate publication and look up the codes. The codes are numerous, and some of them are overlapping. They are assigned somewhat subjectively, and they point to a broad area in one or more FAA reference documents. That makes it harder to ensure effective remedial training.
- In the ACS world, though, the computer test report will list very specific ACS codes. For example, PA.III.B.K4 tells the applicant, the instructor, and the evaluator that there is a need to focus more on right of way rules.
 - PA = Private Pilot Airplane (Applicable ACS)
 - III = Airport & Seaplane Base (Area of Operation)
 - B = Traffic Patterns (Task)
 - K4 = Right of Way Rules (Element)
- The ACS codes (the “S” codes for skills) will eventually be provided on the practical test Notice of Disapproval to show deficient skills.

From PTS to ACS

- Newly-created ACS Exam Review Board* is already using ACS codes as a tool to review and revise knowledge test questions for the Private Pilot Certificate.
- Expansion of coding to other knowledge test question banks will follow.
- ACS codes will also provide guidance for developing new knowledge test questions that are more sharply targeted to essential knowledge, skill, and risk management.

* ACS Exam Review Board includes subject matter experts from several Flight Standards policy divisions, as well as one non-FAA representative who has extensive experience in the test development field.



The FAA has recently created an ACS Exam Review Board that includes subject matter experts from AFS-200 (Air Transportation Division), AFS-400 (Flight Technologies & Procedures Division), AFS-800 (General Aviation & Commercial Division), and AFS-600 (Regulatory Support Division).

It also includes one non-FAA representative who has extensive experience in the test development field.

The ACS Exam Review Board is already using the ACS codes as a tool to review and revise knowledge test questions for the Private Pilot Certificate.

- Expansion of coding to other knowledge test question banks will follow.
- ACS codes will also provide guidance for developing new knowledge test questions that are more sharply targeted to essential knowledge, skill, and risk management.

From PTS to ACS

The ACS also simplifies “paper management” by integrating a number of FAA knowledge exam guidance documents:

- Test Guides (FAA-G-8082 series)
- Learning Statement Reference Guide
- Knowledge Testing Authorization Requirements Matrix

PTS Test Guide LSC Reference Guide (replaced by ACS codes) Test Matrix
<hr/>
= ACS (less paper, less redundancy, and less chance for inconsistency)

Still another benefit is that the ACS simplifies paper management, because it consolidates and integrates several existing knowledge exam guidance documents into the ACS for each certificate and rating. These include:

- The Private Pilot Test Guide (FAA-G-8082-17), which is 127 pages long and is updated approximately three times a year.
- The Learning Statement Reference Guide is 24 pages long and is updated approximately two times a year. Though it is the master legend for all LSCs that could appear on an airman test report, test guides also contain LSCs specific to each certificate and rating. The ACS and its coding system will eliminate any possibility of inconsistencies among these documents.
- The Knowledge Testing Authorization Requirements Matrix is 24 pages long and is updated about three times a year. It includes details on each test issued, including number of questions and time allowed, applicant age requirements, endorsements or test authorizations required to qualify for the test, etc.

The ACS = the PTS + 8082 document + LSC Reference Guide + Test Matrix = less paper, less redundancy, and less chance for inconsistency.

Project History

Phase I – 2011-2012:

- The ARC (Aviation Rulemaking Committee)
 - FAA chartered Airman Testing Standards and Training ARC to obtain expert industry stakeholder advice and recommendations for improving content, process, methodology, and priorities for improving airman knowledge testing.
 - The ARC developed the ACS concept and recommended that the FAA pursue it.



Before we close this introduction to the Airman Certification Standards, here's a brief overview of how it started, and where it is going.

- Phase I – 2011-2012: The FAA chartered the first industry stakeholder group in the form of an Aviation Rulemaking Committee, or ARC. ARCs are the accepted structure for rulemaking projects, but they are also used as a legitimate and transparent way for the FAA to benefit from stakeholder expertise.
- The FAA asked the Aviation Rulemaking Committee to make recommendations on improving the content, process, methodology, and priorities for improving airman knowledge testing.
- The members of the Aviation Rulemaking Committee developed the Airman Certification Standards concept and recommended that the FAA pursue it.

Project History

Phase II – 2012-2013:

- The FAA tasked the industry Aviation Rulemaking Advisory Council (ARAC) to develop the ACS concept.
- ARAC formed the Airman Testing Standards and Training Working Group (ATST WG) to perform this work.
- The ATST WG developed ACS documents for Private, Commercial, and Instructor certificates in Instrument Rating, plus “baseline” proposal for an ATP ACS.
 - PVT, IFR, and CFI ACS submitted for public comment.
- ARAC submitted ATST WG’s report and recommendations to the FAA in September 2013.



Airman Certification Standards
Winter 2015



Federal Aviation
Administration

13

- The FAA reviewed the recommendations from the Aviation Rulemaking Committee and accepted almost all of them. (Note: The only one NOT accepted was a recommendation for the FAA to return all knowledge test questions to the public domain, as they once were.)
- Phase II – 2012-2013: In the second phase of this project, the FAA turned to the Aviation Rulemaking Advisory Council – ARAC – for help. ARAC is an “umbrella” body that provides a transparent legal framework for industry stakeholders to provide advice and recommendations to the FAA.
- ARAC includes a very diverse group of industry experts. When the FAA asks ARAC to accept an assignment or task, ARAC forms a working group of experts to perform that assignment or task.
- In this case, the FAA asked the ARAC to develop the ACS concept. To complete this assignment, ARAC formed the Airman Testing Standards and Training Working Group (ATST WG).
- The Airman Testing Standards and Training Working Group (which included some members of the original Aviation Rulemaking Committee, plus several new members) developed ACS documents for Private, Commercial, and Instructor certificates and the Instrument Rating. The Working Group also created a “baseline” proposal for an ATP ACS.
 - On behalf of the Working Group, the FAA twice established dockets to receive public feedback on the draft PVT, IFR, and Instructor ACS.
- The Working Group submitted its report to its parent body, the ARAC, and ARAC submitted the report to the FAA in September 2013.

Project History

Phase III – 2014-2015:

- The FAA tasked the industry Aviation Rulemaking Advisory Council (ARAC) to further advance the ACS concept.
- In March 2014, ARAC formed the Airman Certification System Working Group (ACS WG) to perform this work.
- Ongoing tasks:
 - Refine & complete ACS for COM, ATP, and CFI.
 - Help FAA map standards to guidance.
 - Prototype use of PVT (PAR) ACS in Orlando area, with strong support from AFS-800 (policy memo) and ORL FSDO (assisting with ACS WG efforts).



That brings us to where we are today.

- Phase III – 2014-2015: Once the FAA reviewed the report created by the Aviation Rulemaking Advisory Council's Airman Testing Standards and Training Working Group, the agency decided it was time to take the next step.
- So – the FAA went back to the ARAC and asked it to help us implement the Working Group's recommendations for adopting the ACS concept.
- To perform that work, the ARAC formed the Airman Certification System Working Group (ACS WG) in March 2014. This group's charter runs through December 2015.
- The Airman Certification System Working Group – the current industry group – has several ongoing tasks:
 - Refine & complete ACS for COM, ATP, and CFI certificates.
 - Help the FAA map standards to guidance.
 - Prototype use of Private Pilot Airplane ACS in the Orlando area, with strong support from AFS-800 and the ORL FSDO.
 - AFS-800 provided a policy memo authorizing use of the ACS in lieu of the PTS on the practical test.
 - The Orlando FSDO is providing assistance to, and oversight of, the industry's prototyping projects in that area.

Project History

Phase III – 2014-2015

- Prototyping:
 - Initial effort with ERAU Summer Academy – June 2014; positive feedback from instructors, evaluators, and ORL FSDO inspectors. Collecting student feedback now.
 - ACS WG and ORL FSDO are collaborating on a larger prototype to include part 61 instructors, applicants, and DPEs. Goal is to develop foundation for future 8900 guidance and ACS job aids.
 - Exploring prototype expansion to ASW and/or AWP in 2015, with a view to “real” implementation of at least one ACS (likely PVT) in late 2015/early 2016.



More on the work in Phase III – 2014-2015

- Prototyping is a very important part of the effort. Both the FAA and the industry experts who developed the Airman Certification Standards approach are anxious to make sure it works in the “real world” before introducing it as the new testing and training standard.
- Prototype efforts started in the summer of 2014, with a small private pilot airplane certification course at the Embry-Riddle Aeronautical University’s Summer Academy program in Daytona Beach.
- This course was too small to draw broad conclusions, but everyone involved reacted positively. Instructors, evaluators, and ORL FSDO inspectors all found the ACS to be a significant improvement over the current approach.
- Since the fall of 2014, Airman Certification System Working Group members and ORL FSDO inspectors have been collaborating on a larger prototype that includes part 61 instructors, applicants, and DPEs.
- The goal is to develop the framework and foundation for future 8900 guidance, ACS job aids, and guidance/standardization training for FAA designated pilot examiners (DPEs).
- If all goes well, the FAA and industry will explore expanding the Private Pilot Airplane prototype to one or two other regions in 2015, while expanding the prototype to include the IFR and Authorized Instructor ACS documents.
- The goal is to be ready for “real” implementation of at least one ACS (likely PVT) in late 2015/early 2016.

Key Points

- *The ACS does not change the checkride*, but it gives the evaluator more focused information on:
 - Knowledge and risk management and special emphasis elements associated with each skill task.
 - Specific information (via ACS codes) on items the applicant missed on the knowledge test.
- Except to streamline and combine overlapping and duplicative tasks (e.g., runway safety), *the ACS does not change PTS elements or performance metrics*.
- The FAA reviews each industry-developed ACS to validate its content and ensure that all PTS elements are included.



- It is important for everyone to understand several key points.
- First, *the ACS does not change the checkride*, and it does not make the checkride any longer than it takes to conduct a PTS checkride today.
- In fact, the ACS could expedite the checkride because it gives the evaluator more focused information on:
 - Knowledge and risk management elements associated with each skill task.
 - Specific information (via ACS codes) on items the applicant missed on the knowledge test.
 - Expectation is for the evaluator to address ONE knowledge element and ONE risk management element in each Task.
 - Evaluator has discretion to address additional knowledge and risk management elements if the airman knowledge test report and/or the applicant's response to questions suggests the need for more thorough coverage.
- Second, except to streamline and combine overlapping and redundant tasks (e.g., runway safety), *the ACS does not change PTS elements or performance metrics*.
 - A team of FAA subject matter experts from all the key policy divisions carefully reviews each industry-developed ACS to validate

its content, and ensure that all PTS elements are included.

Key Points

By offering an integrated, holistic, and systematic approach to standards, guidance, and testing, the ACS:

- Provides better guidance to applicants, instructors, evaluators, and inspectors.
- Allows the FAA to develop better test questions that are clearly tied to standards (“need to know”) and supported by guidance (handbooks).
- Reduces subjectivity and increases system-wide standardization.
- Enhances safety by ensuring that standards, guidance and testing for airman certification all work together effectively.



More potential benefits from the ACS include the following:

- By offering an integrated, holistic, and systematic approach to standards, guidance, and testing, the ACS:
 - Provides better guidance to applicants, instructors, evaluators, and inspectors.
 - Allows the FAA to develop better test questions that are clearly tied to standards (“need to know”) and supported by guidance (handbooks).
 - Reduces subjectivity and increases system-wide standardization.
 - Enhances safety by ensuring that standards, guidance and testing for airman certification all work together effectively.

Questions & Comments?

Please contact:

- **Bob Newell**, Manager, Airman Testing Standards Branch (AFS-630)
 - Robert.L.Newell@faa.gov
 - 405-954-0473
 - www.faa.gov/training_testing/testing/
- **Susan Parson**, Special Technical Assistant, Flight Standards Service (AFS-3A)
 - Susan.Parson@faa.gov
 - 202-267-9064

Resources & info available upon request include:

- Links to ARC & ARAC reports
- FAQs on ACS
- AFS-800 Policy Memo on use of the ACS in lieu of PTS
- Copies of draft ACS documents
- PDF version of this presentation*

*Available at
www.faa.gov/training_testing/testing/



The ACS development process is intended to be as transparent as possible, so questions and comments are welcomed and strongly encouraged. As noted earlier in this presentation, several of the draft ACS documents have benefited from comments received in public dockets that the FAA created on behalf of the various industry working groups. Both the FAA employees assigned to this project and the industry experts who created the ACS are eager to benefit from stakeholder viewpoints and perspectives, and we expect to make other ACS documents available for public comment in the future.

For immediate questions, the screen shows contact and resource information.

Thanks for taking the time to learn about the ACS. Please keep a lookout for future developments in this exciting project.

Bob Newell, Manager, Airman Testing Standards Branch (AFS-630)

Robert.L.Newell@faa.gov - 405-954-0473

http://www.faa.gov/training_testing/testing/

Susan Parson, Special Technical Assistant, Flight Standards Service (AFS-3A)

Susan.Parson@faa.gov - 202-267-9064

Resources & info available upon request include:

- Links to ARC & ARAC reports
- FAQs on ACS
- AFS-800 Policy Memo on use of the ACS in lieu of PTS
- Copies of draft ACS documents

- PDF version of this presentation