DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 61, 63, and 65

[Docket No. FAA–2022–1463; Amdt. Nos. 61–153, 63–46, and 65–64]

RIN 2120–AL74

Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule revises certain regulations governing airman certification. Specifically, the FAA Airman Certification Standards and Practical Test Standards comprise the testing standard for practical tests and proficiency checks for persons seeking or holding an airman certificate and/or rating. This rule incorporates these Airman Certification Standards and Practical Test Standards by reference into the certification requirements for pilots, flight instructors, flight engineers, aircraft dispatchers, and parachute riggers.

DATES: This final rule is effective on May 31, 2024.

The incorporation by reference of certain publications listed in this final rule is approved by the Director of the Federal Register as of May 31, 2024.

ADDRESSES: For information on where to obtain copies of rulemaking documents and other information related to this final rule, see ''How to Obtain Additional Information'' in the **SUPPLEMENTARY INFORMATION** section of this document.

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SUPPLEMENTARY INFORMATION:

List of Abbreviations and Acronyms Frequently Used in This Document

Administrative Procedure Act (APA)
Aeronautical Information Manual (AIM)
Airman Certification Standards (ACS)
Airline Transport Pilot (ATP)
Area of Operation (AOO)
Aviation Rulemaking Advisory Committee ACS Working Group (ARAC ACS WG)
Instrument Proficiency Check (IPC)
Instrument Flight Rules (IFR)
Incorporation by Reference (IBR)
Pilot-in-Command Proficiency Check (PIC PC)
Practical Test Standards (PTS)
Vertical Takeoff and Landing (VTOL)
Visual Flight Rules (VFR)

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I. Executive Summary

This final rule adopts several amendments to parts 61, 63, and 65 of Title 14 of the Code of Federal Regulations (14 CFR) by incorporating by reference (IBR) the Airman Certification Standards (ACS) and Practical Test Standards (PTS). The ACS and PTS [1] serve as the testing standards for airman certificates and rating practical tests. The FAA notes that, while certain revisions were made to the ACS and PTS as an outgrowth of public notice and comment, there are no major substantive changes to the testing standards already in use or the conduct of the practical test such that the scope of the practical test is altered. Rather, this final rule brings the ACS and PTS into the FAA regulations through the proper notice and comment process required by the Administrative Procedure Act (APA).[2]

As it pertains to pilots and flight instructors, the FAA incorporates thirty (30) pilot and flight instructor ACS and PTS in part 61 by reference through a centralized IBR section in new § 61.14. The FAA directs compliance on the respective practical tests and proficiency checks with the appropriate ACS and PTS through revisions in §§ 61.43, 61.57, 61.58, 61.321, and 61.419. Additionally, the final rule adds an appendix to part 61, which sets forth which ACS or PTS applies to a certificate and/or rating sought or proficiency check.

This final rule also makes a non-substantive conforming amendment to § 61.157 to align the Airline Transport Pilot (ATP) airplane and powered-lift flight proficiency areas of operation with the areas of operation contained in the ATP and Type Rating for Airplane Category ACS and ATP and Type Rating for Powered-Lift Category ACS, respectively. The FAA also revised ''must consist of'' in § 61.57(d) to ''must include'' to align with the definitions in § 1.3. The remaining changes were made to the ACS or PTS documents as a result of public comments.

Further, this final rule revises certain provisions applicable to flight engineers in part 63 and aircraft dispatchers and parachute riggers in part 65. First, this final rule incorporates the Flight Engineer PTS by reference in § 63.39. Additionally, this final rule adds the Aircraft Dispatcher PTS and Parachute Rigger PTS to § 65.23, the existing centralized IBR section for part 65, and removes the now inapplicable Aviation Mechanic PTS from the centralized section. The final rule also revises the appropriate sections in subparts C and F of part 65 (*i.e.,* §§ 65.59, 65.115, 65.119, 65.123) to require compliance with the respective PTS. Finally, minor editorial revisions remove gender references in both parts.

II. Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in title 49 of the United States Code (U.S.C.). Subtitle I, section 106, describes the authority of the FAA Administrator to promulgate regulations and rules. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

[1] ACS and PTS refers to both the singular Standard and the plural Standards throughout the document.

[2] 5 U.S.C. 551–559.

This rulemaking is promulgated under the authority granted to the Administrator in 49 U.S.C. subtitle VII, part A, subpart iii, chapter 401, Section 40113 (prescribing general authority of the Administrator of the FAA with respect to aviation safety duties and powers to prescribe regulations) and subpart III, chapter 447, sections 44701 (general authority of the Administrator to promote safe flight of civil aircraft in air commerce by prescribing regulations and setting minimum standards for other practices, methods, and procedures necessary for safety in air commerce and national security), 44702 (general authority of the Administrator to issue airman certificates), and 44703 (general authority of the Administrator to prescribe regulations for the issuance of airman certificates when the Administrator finds, after investigation, that an individual is qualified for and physically able to perform the duties related to the position authorized by the certificate). This rulemaking is within the scope of that authority.

III. Background

A. Regulatory History and Incorporation by Reference

Under 49 U.S.C. 44703, the Administrator of the FAA possesses the authority to issue airman certificates when the Administrator finds, after investigation, that an individual is qualified for and able to perform the duties related to the position authorized by the certificate.[3] The Administrator carries out this investigative authority through 14 CFR parts 61, 63, and 65, which prescribe the requirements for airmen to obtain a certificate and a rating.[4] Each respective part contains the general requirements for eligibility, which include aeronautical knowledge, flight proficiency, and aeronautical experience, as applicable, for each certificate and/or rating sought. This generally includes the requirement to pass a practical test[5] specific to the certificate and/or rating sought.[6]

The FAA has long set forth certain items for inclusion on the practical test. Prior to 1997,[7] these items were included directly in the regulations of part 61 through flight proficiency requirements, resulting in an unclear, broad, and discretionary testing framework.[8] After 1997, the FAA set forth the flight proficiency requirements for flight training and practical tests with approved areas of operation, more general in character than the flight proficiency procedures and maneuvers, and simplified the practical test general procedures regulations to require performance of the areas of operation.[9]

To implement testing on the areas of operation, the FAA established the Practical Test Standards (PTS) to define acceptable performance of the flight proficiency required to obtain a certificate and/or rating. The PTS applied to specific certificates and/or ratings sought and incorporated the areas of operation set forth in the applicable regulations,[10] some of which continue to be used as the current testing standard. Within the PTS, the areas of operation were designated as phases of the practical test, which were further extrapolated into tasks comprised of knowledge areas, flight procedures, or maneuvers appropriate to the overarching area of operation. An evaluator[11] is responsible for determining whether the applicant meets the standards outlined in the objective of each required task evaluated in accordance with the respective PTS. While developed primarily in response to part 61 revisions, the FAA also published and utilized PTS for testing under parts 63 and 65.[12]

In 2011, the FAA began establishing the ACS to enhance the testing standard for the knowledge and practical tests.[13] In cooperation with the ACS Working Group (ARAC ACS WG), established through the Aviation Rulemaking Advisory Committee (ARAC),[14] the FAA integrated ''aeronautical knowledge'' and ''risk management'' elements into the existing areas of operations and tasks set forth in the PTS. Therefore, the ACS is a comprehensive presentation integrating the standards for what an applicant must know, consider, and do to demonstrate proficiency to pass the tests required for issuance of the applicable airman certificate or rating.

Given this transition, in 2018,[15] the FAA removed the reference to the practical test standards in § 61.43 and broadened the regulatory language to encompass the standards set forth in the ACS, where applicable (*i.e.,* where ACS were developed and actively utilized for practical tests of certain certificates). The regulatory language adopted in 2018 that required applicants to perform the tasks specified in the areas of operation for the airman certificate or rating sought is how the regulation is situated prior to this final rule. The FAA notes that some PTS have fully transitioned to ACS, rendering those

[3] By statute, a person may not serve in any capacity as an airman with respect to a civil aircraft, aircraft engine, propeller, or appliance used, or intended for use, in air commerce without an airman certificate authorizing the airman to serve in the capacity for which the certificate was issued. 49 U.S.C. 44711. Title 49 U.S.C. 40102 sets forth the definition and the duties of an airman.

[4] Part 61 prescribes certification requirements for pilots, flight instructors, and ground instructors; part 63 prescribes certification requirements for flight crewmembers other than pilots; part 65 prescribes certification requirements for airmen other than flight crewmembers.

[5] A practical test is a test on the areas of operations for an airman certificate, rating, or authorization that is conducted by having the applicant respond to questions and demonstrate maneuvers in flight, in a flight simulator, or in a flight training device, pursuant to 14 CFR 61.1. Practical tests are administered by FAA inspectors or private persons designated by the Administrator. *See* 49 U.S.C. 44702(d).

[6] Certain certificates do not require the successful completion of a practical test to obtain the certificate. For example, a certificate based on military competency requires only a military competency aeronautical knowledge test, pursuant to § 61.73(b); similarly, a ground instructor certificate requires only a knowledge test on fundamentals of instructing and certain aeronautical knowledge areas, pursuant to § 61.213.

[7] Prior to 1997, the FAA referred to ''practical tests'' as both ''practical test'' and ''flight test.''

[8] For a comprehensive history of this testing framework, see *Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference* notice of proposed rulemaking, 87 FR 75955 (Dec. 12, 2022).

[9] *Pilot, Flight Instructor, Ground Instructor, and Pilot School Certification Rules* final rule, 62 FR 16220 (Apr. 4, 1997).

[10] As an example, the FAA published a PTS for the Commercial Pilot—Rotorcraft Category, Helicopter and Gyroplane Class. Within the PTS, the areas of operation correspond with the areas of operation set forth in 14 CFR 61.127(b)(3) and (4), flight proficiency areas of operation for rotorcraft category rating with a helicopter class rating and rotorcraft category rating with a gyroplane class rating, respectively.

[11] As it applies to the particular evaluation, an evaluator is considered: an aviation safety inspector; pilot examiner (other than administrative pilot examiners); training center evaluator (TCE); chief instructor, assistant chief instructor, or check instructor of a pilot school holding examining authority; an instrument flight instructor conducting an instrument proficiency check; or an authorized sport pilot instructor.

[12] Specifically, the FAA developed PTS for Flight Engineers in part 63 and Aircraft Dispatchers, Mechanic Technicians, and Parachute Riggers in part 65. Because these regulations do not specifically set out the areas of operation in the same manner as part 61, respective sections of this preamble further describe these PTS.

[13] The ACS were intended to implement a new, systematic approach to testing that would (1) provide clearer standards, (2) consolidate redundant tasks, and (3) connect the standards for knowledge, risk management, and skills to the knowledge and practical tests.

[14] The Federal Advisory Committee Act, 5 U.S.C. app. 2, provides authority for the ARAC. The ARAC ACS WG includes the FAA, advocacy groups, instructor groups, training providers, academic institutions, and labor organizations.

[15] *Regulatory Relief: Aviation Training Devices; Pilot Certification, Training, and Pilot Schools; and Other Provisions* final rule, 83 FR 30232 (Jun. 27, 2018).

corresponding PTS obsolete.[16] While FAA continues to actively convert the remaining PTS to ACS in collaboration with the ARAC ACS WG, FAA will continue to use the PTS for some certificates and ratings pending development of the corresponding ACS, followed by further rulemaking.

While FAA did not originally consider the content of the ACS and PTS to contain regulatory requirements, as stated in the 2018 final rule,[17] use of the ACS and PTS by the FAA impose requirements on all persons seeking an airman certificate or rating in parts 61, 63, and 65. As previously discussed, the ACS and PTS require an applicant seeking a certificate or rating to complete specific tasks and maneuvers to a minimum prescribed standard to obtain the applicable certificate or rating.[18] As such, if an applicant does not perform a task to the standard in the applicable ACS or PTS, the applicant cannot obtain the applicable certificate and rating. Unsatisfactory performance results in a notice of disapproval and/or denial of the certificate or rating.

Because of the regulatory nature and purpose of the ACS and PTS, this final rule will IBR the ACS and PTS into parts 61, 63, and 65 so that the standards carry the full force and effect of regulation. Due to the unique nature of the ACS and PTS documents, which are lengthy and contain complex technical tables, the FAA finds it more appropriate to incorporate these standards by reference than to reproduce the documents in their entirety into the Code of Federal Regulations (CFR), as subsequently discussed in this preamble.

IBR is a mechanism that allows Federal agencies to comply with the requirements of the APA to publish rules in the **Federal Register** and the CFR by referring to material published elsewhere.[19] Material that is incorporated by reference has the same legal status as if it were published in full in the CFR and **Federal Register**.

In accordance with 5 U.S.C. 552(a) and 1 CFR part 51,[20] the FAA makes the ACS and PTS reasonably available to interested parties by providing free online public access to view on the FAA Training and Testing website at *www.faa.gov/training_testing.* The ACS and PTS are available for download, free of charge, at the provided web address. The FAA will continue to provide the ACS and PTS to interested parties in this manner. For a complete list and discussion of the ACS and PTS incorporated by reference in parts 61, 63, and 65, see section IV.A.2. of this preamble.

B. Summary of NPRM

On December 12, 2022, the FAA published a notice of proposed rulemaking (NPRM) titled ''Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference.'' [21] In the NPRM, the FAA proposed several amendments to parts 61, 63, and 65 that would IBR the ACS and PTS into the certification requirements for pilots, flight instructors, flight engineers, aircraft dispatchers, and parachute riggers. The rulemaking docket [22] contained all ACS and PTS proposed to be incorporated by reference for public inspection.

C. General Overview of Comments

The NPRM provided a 30-day comment period, extended by an additional 30 days,[23] which ended on February 10, 2023. The FAA received comments from 39 individuals and organizations. The majority of comments came from individuals. Several industry advocacy organizations also submitted comments. Many comments pertained to more than one issue, such as specific revisions to narrow elements and tasks within the PTS and ACS, suggestions considered out of scope, legal issues, and administrative matters. In addition, the majority of comments received pertained to the content of the ACS and PTS documents rather than the proposed amendments to parts 61, 63, and 65.

IV. Discussion of the Final Rule and Comments

A. Amendments to 14 CFR Parts 61, 63, and 65

In the NPRM, the FAA proposed to amend parts 61, 63, and 65 to IBR the ACS and PTS. The FAA received several general comments opposed to this rulemaking, as discussed in the subsequent section. However, the FAA did not receive any comments suggesting alternatives to the mechanism of IBR or to the regulatory language in the proposed rule. The FAA adopts the regulatory text as proposed with various revisions to the ACS and PTS themselves, as discussed in the subsequent sections of this preamble. The following table lists the amendments made to the FAA regulations by this final rule and a summary of those provisions.

TABLE 1—AMENDMENTS TO FAA REGULATIONS

14 CFR § affected	Summary of provision
61.14	Create a centralized IBR section to IBR 30 ACS and PTS in part 61.[24]
61.43(a)(1)	Revise to require completion of the practical test for a certificate or rating to consist of performing the tasks specified in the areas of operation in the applicable ACS or PTS for the airman certificate or rating sought.
61.57(d)(1)	Revise to state that the instrument proficiency check (IPC) must consist of the areas of operation contained in the applicable ACS as appropriate to the rating held.
61.58(d)(1)	Revise to require that the PIC proficiency check specifically consists of the areas of operation contained in the applicable ACS or PTS.

[16] The FAA notes that it received one comment on the NPRM to this final rule contending that utilization of the ACS has increased the accident rate overall, encouraging a transition back to the PTS. However, the commenter did not provide any data, nor has the FAA identified any correlation between accidents and the ACS. The FAA intends to continue moving forward with the ACS framework as the testing standard for the foreseeable future.

[17] 83 FR at 30269.

[18] The FAA directs examiners to conduct practical tests in accordance with the appropriate ACS or PTS pursuant to FAA Order 8900.1, Vol. 5, Chap. 1, Sec. 4. The appropriate volume, chapter, and section pursuant to the applicable certificate or rating sought found in FAA Order 8900.1 provides additional direction (*e.g.,* Vol. 1, Chap. 2, Sec. 7, Conduct a Private Pilot Certification, Including Additional Category/Class Ratings, directs an examiner to conduct the practical test in accordance with the private pilot PTS in paragraph 5–382).

[19] 5 U.S.C. 552(a).

[20] 5 U.S.C. 552(a) requires that matter incorporated by reference be ''reasonably available'' as a condition of its eligibility. Further, 1 CFR 51.5(b)(2) requires that agencies incorporating material by reference discuss in the preamble of the final rule the ways that the material it incorporates by reference is reasonably available to interested parties and how interested parties can obtain the material.

[21] 87 FR 75955.

[22] Docket No. FAA–2022–1463.

[23] Extension of Comment Period, *Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference,* 88 FR 24 (Jan. 3, 2023).

[24] See section IV.A.2.i. of this preamble for a list of the ACS and PTS that will be incorporated by reference in new § 61.14.

TABLE 1—AMENDMENTS TO FAA REGULATIONS—Continued

14 CFR § affected	Summary of provision
61.157(e)	Revise areas of operation to align with the areas of operation in the ACS.
61.321(b)	Revise to require the proficiency check for an additional light-sport aircraft privilege to consist of the appropriate areas of operation contained in the applicable PTS.
61.419(b)	Revise to require the flight instructor to successfully complete a proficiency check consisting of the appropriate areas of operation contained in the applicable PTS for the additional category and class flight instructor privilege sought.
Appendix A to part 61	Add appendix A to aid applicants and evaluators in identifying which ACS or PTS they must utilize for the certificate and/or rating sought or proficiency check to administer.
63.39	Revise to IBR the Flight Engineer PTS and require an applicant for a flight engineer certificate to satisfactorily demonstrate the objectives in the areas of operation contained in the Flight Engineer PTS.
65.23(a)(1) and (2)	Revise the centralized IBR section in part 65 to include the Aircraft Dispatcher PTS and Parachute Rigger PTS.
65.59	Revise to require an aircraft dispatcher to satisfactorily demonstrate the objectives in the areas of operation specified in the Aircraft Dispatcher PTS.
65.115 and 65.119	Revise to require applicant to pass the oral and practical test by satisfactorily demonstrating the objectives in the areas of operation in the Parachute Rigger PTS applicable as appropriate to the respective certificate (*e.g.,* senior parachute rigger, master parachute rigger) and type rating sought.
65.123(b)	Revise to require an applicant seeking an additional type rating to satisfactorily demonstrate the objectives in the area of operation applicable to the type rating sought, as specified in the Parachute Rigger PTS.

1. Comments Concerning IBR

The FAA received a number of comments on the mechanism of IBR itself. These comments included enforcement questions, concerns about the FAA's justification for IBR, and apprehension with the timeliness and flexibility of the process. This section responds to concerns about IBR and provides additional explanation on IBR as set forth by the APA.

First, the FAA received several comments regarding the effects of this rulemaking on enforcement. Two individuals and the National Association of Flight Instructors (NAFI) expressed concern that incorporating the ACS and PTS by reference may subject an applicant who fails a task or receives an unsatisfactory on a practical test or that applicant's instructor to an enforcement action. Additionally, NAFI expressed concern that the regulatory nature of the ACS and PTS would leave flight instructors who provide an endorsement that an applicant has received and logged the appropriate training and is prepared for the practical test [25] vulnerable to an enforcement action should the applicant fail the practical test. Further, one commenter surmised that the regulatory nature of the ACS and PTS would result in a violated regulation when a designated pilot examiner improperly fails an applicant, resulting in an enforcement or higher legal action.

The Administrator does not currently bring enforcement actions against those persons who fail practical tests, and this final rule does not change such practice. Section 61.43, as amended by this rule, sets forth the general procedures for the practical test and defines successful completion of a practical test in terms of the tasks specified in the Areas of Operation contained in the applicable ACS or PTS. Similarly, §§ 61.57, 61.58, 61.321, and 61.419 set forth the requirements for the completion of certain proficiency checks (*i.e.,* completion of the areas of operation contained in the applicable ACS or PTS). The FAA regards these completion requirements as eligibility standards that allow an applicant to receive a certificate and/or rating (or obtain an endorsement for the privileges associated with completion of a proficiency check). Therefore, the only consequence for not successfully completing a specific task within an ACS or PTS as incorporated by reference would be ineligibility for a certificate and/or rating sought (or privileges accompanying a proficiency check). The applicant would simply not receive the certificate, rating, or privileges and would not be subject to an enforcement action only on the basis of unsatisfactory performance of the test or check.

The FAA further emphasizes that, for the same reasons, the regulatory nature of the ACS and PTS would not affect the responsibilities of a flight instructor who endorses an applicant for purposes of the practical test and that applicant later fails the practical test. Specifically, the FAA recognizes that an applicant could fail a practical test for many reasons that may not necessarily reflect upon the flight instructor, including stress, misunderstanding, or human error. However, the FAA has the authority to take appropriate action, including reexamining or reinspecting a certificate holder, to resolve questions as to the holder's ongoing competence or qualification to hold a certificate.[26]

Second, one commenter presented opposition to the incorporation by reference and believed the ACS and PTS documents should never carry the full force and effect of regulation. The commenter's reason is that ACS/PTS is vague, which is by design because it is a framework. The ACS/PTS is built to be adaptive to situations and scenarios and to evolve with the industry. Additionally, the commenter stated that the ACS and PTS are designed to allow for an evaluator's judgment, individualism, interpretations, and conclusions.

The FAA agrees that the ACS and PTS documents are meant to be adaptive and each practical test is to be tailored to the applicant based on the identified deficiencies of the knowledge test. However, the ACS contain tasks that must be performed to demonstrate an individual has met the standard of proficiency required to obtain an airman certificate or rating. As such, the ACS are regulatory, and IBR is the appropriate process to make them so.

In addition, commenters took issue with the general proposal to IBR the PTS and ACS documents, stating that there is a lack of sufficient justification for incorporating these documents by reference. The FAA holds the legal authority to utilize the mechanism of IBR as afforded by the APA. As previously discussed, under 49 U.S.C. 44703, the Administrator of the FAA possesses the authority to issue airman certificates when the Administrator finds after investigation that an individual is qualified for and able to perform the duties related to the

[25] See 14 CFR 61.39(a)(6).

[26] See 49 U.S.C. 44709.

position authorized by the certificate. The Administrator carries out this authority through 14 CFR parts 61, 63, and 65, which prescribe the requirements for airmen to obtain a certificate and/or rating. The Administrator ensures that an airman possesses the requisite knowledge and skill to obtain a certificate and/or rating through demonstration of tasks consisting of knowledge, risk management, and skill elements as set forth in the applicable ACS and PTS.

A rule [27] that has the force and effect of law (*i.e.,* one that imposes duties or obligations on regulated parties) constitutes a legislative rule that must be adopted in accordance with the notice and comment requirements of the Administrative Procedure Act (APA).[28] The tasks in the ACS and PTS are legislative rules because an individual must accomplish them to obtain an airman certificate. As such, under the APA, the regulated community must receive notice and the opportunity to comment on the standards. The FAA determined that IBR presents the most appropriate mechanism by which to bring the ACS and PTS into the regulations.[29] The 33 total ACS and PTS that accompanied the NPRM in the docket consist of many pages and include tables, notes, references, appendices, and technical material. Converting these standards into a format acceptable to print directly in the CFR would, first, draw upon considerable agency resources, second, result in a brand new presentation of material that could present usability challenges for the agency and regulated community, and, third, substantially increase the volume of material published in the **Federal Register** and CFR.[30] Therefore, the FAA adopts the 33 ACS and PTS through incorporation by reference, as proposed, and maintains that, for the reasons discussed, sufficient support exists for this rulemaking.

Some commenters claimed that the process for changing the ACS and PTS documents must be faster and more flexible than the rulemaking process will allow due to technological developments and innovative aviation advancements. Commenters, particularly powered-lift manufacturers and planned commercial operators, emphasized the need to nimbly update the ACS and PTS in a timely manner and suggested the publication of clear revision cycles, review and revision timelines, and standing RINs.[31]

The FAA acknowledges industry's concerns that the rulemaking process will prevent quick updates to the ACS and PTS.[32] Rulemaking will be required to revise any document incorporated by reference into the CFR. As the ACS and PTS contain requirements for obtaining an airman certificate or rating, rulemaking will prevent the agency from imposing new requirements on a regulated entity by mandating a new version of a document without adhering to the APA (*i.e.,* by not providing notice of the changes and an opportunity for comment). Essentially, because of the regulatory status of ACS and PTS, should the FAA want to add a task or element to an ACS or PTS, the regulated community would be given notice, have the opportunity to provide input on the addition, and have time to prepare accordingly for the change before effectivity. Given the technical nature of the ACS and PTS, the FAA intends to explore an expedited method for making required updates through the rulemaking process similar to the process used for airspace actions. For updates that are administrative in nature, the FAA may use direct final rules or interim final rules to make those types of non-substantive changes.[33]

2. Final Rule Amendments

The FAA's regulatory amendments to parts 61, 63, and 65 remain unchanged from the proposal.

i. Airman Certification Standards and Practical Test Standards Incorporated by Reference Into Part 61

Title 14 CFR part 61 sets forth the certification requirements for pilots and flight instructors. As previously stated, new centralized IBR § 61.14 lists the ACS and PTS incorporated by reference into part 61 pertaining to pilots and flight instructors. This section summarizes 15 ACS and 15 PTS [34] that require applicants to perform the tasks specified in the areas of operation for the airman certificate and/or rating sought, as applicable.[35] As noted previously, the FAA makes the ACS and PTS reasonably available for interested parties to view by providing free online public access to the FAA Training and Testing website at *www.faa.gov/training_testing.* Interested parties can also download the ACS and PTS free of charge at the provided web address. Additionally, the FAA developed an ACS companion guide for pilots providing guidance on certain non-regulatory and technical information previously published in the ACS.

Airman Certification Standards:

- FAA–S–ACS–2, Commercial Pilot for Powered-Lift Category Airman Certification Standards; November 2023.
  - This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for commercial pilot certification in the powered-lift category.
  - This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; High-Altitude Operations; Special Operations; and Postflight Procedures.
- FAA–S–ACS–3, Instrument Rating—Powered-Lift Airman Certification Standards; November 2023.
  - This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for private pilot certification in the instrument rating in the powered-lift category.

[27] As defined in 5 U.S.C. 551, a ''rule'' is ''the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency[.]''

[28] 5 U.S.C. 552(A), which states, ''except to the extent that a person has actual or timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the **Federal Register** and not so published.

[29] For the purpose 5 U.S.C. 552(a), matter reasonably available to the class of persons affected thereby is deemed published in the **Federal Register** when incorporated by reference therein with the approval of the Director of the Federal Register.''

[30] The FAA notes that 1 CFR 51.7 states that an assumption exists that a publication produced by the same agency that is seeking its approval is inappropriate for incorporation by reference. However, the ACS and PTS overcame this assumption under the standards set forth in 1 CFR 51.7(b) due to the unique qualities described here.

[31] A Regulation Identifier Number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Regulatory and Deregulatory Actions.

[32] The FAA notes that it is unaware of any updates that were immediately required to respond to a safety concern or new technology. If the FAA determines that safety requires immediate action, the FAA will take the necessary steps within all available means to address that concern.

[33] *See* ACUS Recommendation 95.4, Jun. 15, 1995; ACUS Recommendation 2011–5, Dec. 8, 2011; and OMB Circular A–119, Jan. 27, 2016.

[34] The FAA added dates to the regulatory text for version and document identification. This date, November 2023, provides a specific identification month for the PTS and ACS.

[35] In accordance with 1 CFR 51.5(b)(3), an agency must summarize the material it incorporates by reference in the preamble of the final rule. Sections IV.A.2.ii. and iii. of this preamble summarize the material incorporated by reference in 14 CFR parts 63 and 65.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Air Traffic Control (ATC) Clearances and Procedures; Flight by Reference to Instruments; Navigation Systems; Instrument Approach Procedures; Emergency Operations; and Postflight Procedures.

• FAA–S–ACS–6C, Private Pilot for Airplane Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the private pilot certification in airplane category, single-engine land and sea, and multiengine land and sea classes.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers and Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; Basic Instrument Maneuvers; Emergency Operations; Multiengine Operations; Night Operations; and Postflight Procedures.

• FAA–S–ACS–7B, Commercial Pilot for Airplane Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the commercial rating in the airplane category, single-engine land and sea, and multiengine land and sea classes.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers and Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; High-Altitude Operations; Emergency Operations; Multiengine Operations; and Postflight Procedures.

• FAA–S–ACS–8C, Instrument Rating—Airplane Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for private pilot certification in the instrument rating in the airplane category.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Air Traffic Control (ATC) Clearances and Procedures; Flight by Reference to Instruments; Navigation Systems; Instrument Approach Procedures; Emergency Operations; and Postflight Procedures.

• FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for airline transport pilot and type rating certification in the airplane category.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Takeoffs and Landings; In-flight Maneuvers; Stall Prevention; Instrument Procedures; Emergency Operations; and Postflight Procedures.

• FAA–S–ACS–13, Private Pilot for Powered-Lift Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for private pilot certification in the powered-lift category.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; Basic Instrument Maneuvers; Emergency Operations; Night Operations; and Postflight Procedures.

• FAA–S–ACS–14, Instrument Rating—Helicopter Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the instrument rating helicopter.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Air Traffic Control (ATC) Clearances and Procedures; Flight by Reference to Instruments; Navigation Systems; Instrument Approach Procedures; Emergency Operations; and Postflight Procedures.

• FAA–S–ACS–15, Private Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for private pilot certification in the rotorcraft category helicopter rating.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Navigation; Emergency Operations; Night Operations; and Postflight Procedures.

• FAA–S–ACS–16, Commercial Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for a commercial pilot certification in the rotorcraft category helicopter rating.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Navigation; Emergency Operations; Special Operations; and Postflight Procedures.

• FAA–S–ACS–17, Airline Transport Pilot and Type Rating for Powered-Lift Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for airline transport pilot and type rating certification in the powered-lift category.

○ This ACS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Takeoffs and Departure Phase; In-flight Maneuvers; Instrument Procedures; Landings and Approaches to Landings; Emergency Operations; and Postflight Procedures.

• FAA–S–ACS–25, Flight Instructor for Airplane Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the flight instructor certificate in the airplane category.

○ This ACS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Fundamentals of Flight; Performance and Ground Maneuvers, Slow Flight, Stalls, and Spins; Basic Instrument Maneuvers; Emergency Operations; Multiengine Operations; and Postflight Procedures.

• FAA–S–ACS–27, Flight Instructor for Powered-Lift Category Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency

standards for the flight instructor certificate in the powered-lift category.

○ This ACS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Fundamentals of Flight; Performance Maneuvers; Ground Reference Maneuvers; Slow Flight and Stalls; Basic Instrument Maneuvers; Emergency Operations; Special Operations; and Postflight Procedures.

• FAA–S–ACS–28, Flight Instructor—Instrument Rating Powered-Lift Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the flight instructor instrument rating in the powered-lift category.

○ This ACS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Air Traffic Control Clearances and Procedures; Flight by Reference to Instruments; Navigation Aids; Instrument Approach procedures; Emergency Operations; and Postflight Procedure.

• FAA–S–ACS–29, Flight Instructor for Rotorcraft Category Helicopter Rating Airman Certification Standards; November 2023.

○ This ACS communicates the aeronautical knowledge, risk management, and flight proficiency standards for the flight instructor certificate in the rotorcraft category helicopter rating.

○ This ACS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport and Helicopter Operations; Hovering Maneuvers; Takeoffs, Landings, and Go-Arounds; Fundamentals of Flight; Performance Maneuvers, Emergency Operations; Special Operations; and Postflight Procedures.

Practical Test Standards:

• FAA–S–8081–3B, Recreational Pilot Practical Test Standards for Airplane Category and Rotorcraft Category; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the recreational pilot practical tests for airplane, rotorcraft/helicopter, and rotorcraft/gyroplane.

○ This PTS contains the following Areas of Operation for Single-Engine Airplane: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landing, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; and Postflight Procedures.

○ This PTS contains the following Areas of Operation for Rotorcraft Helicopter: Preflight Preparation; Preflight Procedures; Airport and Heliport Operations; Hovering Maneuvers; Takeoffs, Landing, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.

○ This PTS contains the following Areas of Operation for Rotorcraft Gyroplane: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Flight at Slow Airspeeds; Emergency Operations; and Postflight Procedures.

• FAA–S–8081–7C, Flight Instructor Practical Test Standards for Rotorcraft Category Gyroplane Rating; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the flight instructor certification practical tests for the rotorcraft category, gyroplane class.

○ This PTS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subjects; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Fundamentals of Flight; Performance Maneuvers; Flight at Slow Airspeeds; Ground Reference Maneuvers; Emergency Operations; and Postflight Procedures.

• FAA–S–8081–8C, Flight Instructor Practical Test Standards for Glider Category; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the flight instructor certification practical tests for the glider category.

○ This PTS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport and Gliderport Operations; Launches and Landings; Fundamentals of Flight; Performance Airspeeds; Soaring Techniques; Performance Maneuvers; Slow Flight, Stalls, and Spins; Emergency Operations; and Postflight Procedures.

• FAA–S–8081–9E, Flight Instructor Instrument Practical Test Standards for Airplane Rating and Helicopter Rating; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the flight instructor certification practical tests for airplane and helicopter ratings.

○ This PTS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subject Areas; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Air Traffic Control Clearances and Procedures; Flight by Reference to Instruments; Navigation Aids; Instrument Approach Procedures; Emergency Operations; and Postflight Procedures.

• FAA–S–8081–15B, Private Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the private pilot practical test for the rotorcraft category, gyroplane class.

○ This PTS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuver, Ground Reference Maneuvers; Navigation; Flight at Slow Airspeeds; Emergency Operations; and Postflight Procedures.

• FAA–S–8081–16C, Commercial Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the commercial pilot practical test for the rotorcraft category gyroplane class.

○ This PTS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers, Navigation; Flight at Slow Airspeeds; Emergency Procedures; and Postflight Procedures.

- FAA–S–8081–17A, Private Pilot Practical Test Standards for Lighter-Than-Air Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the private pilot certification practical tests for the lighter-than-air category, balloon and airship classes.
  - This PTS contains the following Areas of Operation for the Balloon class: Preflight Preparation; Preflight Procedures; Airport Operations; Launches and Landings; Performance Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for the Airship class: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.
- FAA–S–8081–18A, Commercial Pilot Practical Test Standards for Lighter-Than-Air Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the commercial pilot certification practical tests for the lighter-than-air category, balloon and airship classes.
  - This PTS contains the following Areas of Operation: Fundamentals of Instructing; Technical Subjects; Preflight Preparation; Preflight Lesson on a Maneuver to be Performed in Flight; Preflight Procedures; Airport Operations; Launches and Landings; Performance Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.
- FAA–S–8081–20A, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Rotorcraft Category Helicopter Rating; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the airline transport pilot and type rating practical tests for helicopters.
  - This PTS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Takeoff and Departure Phase; Inflight Maneuvers; Instrument Procedures; Landings and Approaches to Landings; Normal and Abnormal Procedures; Emergency Procedures; and Postflight Procedures.
- FAA–S–8081–22A, Private Pilot Practical Test Standards for Glider Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the private pilot certification practical test for the glider category.
  - This PTS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Gliderport Operations; Launches and Landings; Performance Airspeeds; Soaring Techniques; Performance Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; and Postflight Procedures.
- FAA–S–8081–23B, Commercial Pilot Practical Test Standards for Glider Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the commercial pilot certification practical test for the glider category.
  - This PTS contains the following Areas of Operation: Preflight Preparation; Preflight Procedures; Airport and Gliderport Operations; Launches and Landings; Performance Speeds; Soaring Techniques; Performance Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; and Postflight Procedures.
- FAA–S–8081–29A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Airplane Category, Gyroplane Category, and Glider Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the sport pilot practical tests and proficiency checks for the airplane, gyroplane, glider, and flight instructor.
  - This PTS contains the following Areas of Operation for Sport Pilot Airplane: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for Sport Pilot Gyroplane: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Flight at Slow Airspeeds; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for Sport Pilot Glider: Preflight Preparation; Preflight Procedures; Airport and Gliderport Operations; Launches and Landings; Performance Speeds; Soaring Techniques; Navigation; Slow Flight and Stalls; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for Flight Instructor: Fundamentals of Instructing; Technical Subject Areas; and Preflight Lesson on a Maneuver to be Performed in Flight.
- FAA–S–8081–30A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Lighter-Than-Air Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the sport pilot practical tests and proficiency checks for the airship, balloon, flight instructor.
  - This PTS contains the following Areas of Operation for Sport Pilot Airship: Preflight Preparation; Preflight Procedures; Airport Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for Sport Pilot Balloon: Preflight Preparation; Preflight Procedures; Airport Operations; Launches and Landings; Performance Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.
  - This PTS contains the following Areas of Operation for Sport Pilot Flight Instructor: Fundamentals of Instructing; Technical Subject Areas; and Preflight Lesson on a Maneuver to be Performed in Flight.
- FAA–S–8081–31A, Sport Pilot and Sport Pilot Flight Instructor Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Category; November 2023.
  - This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the sport pilot practical tests and proficiency checks for the weight-shift-control, powered parachute, and flight instructor.
  - This PTS contains the following Areas of Operation for Sport Pilot Weight-Shift-Control: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Slow

Flight and Stalls; Emergency Operations; and Postflight Procedures.

○ This PTS contains the following Areas of Operation for Sport Pilot Powered Parachute: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Emergency Operations; and Postflight Procedures.

○ This PTS contains the following Areas of Operation for Sport Pilot Flight Instructor: Fundamentals of Instructing; Technical Subject Areas; and Preflight Lesson on a Maneuver to be Performed in Flight.

• FAA–S–8081–32A, Private Pilot Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Aircraft Category; November 2023.

○ This PTS establishes the aeronautical knowledge, special emphasis areas considered critical to flight safety, and proficiency standards for the private pilot practical tests for powered parachute and weight-shift-control.

○ This PTS contains the following Areas of Operation for Powered Parachute: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuver; Ground Reference Maneuvers; Navigation; Emergency Operations; Night Operations; and Postflight Procedures.

○ This PTS contains the following Areas of Operation for Weight-Shift-Control Aircraft: Preflight Preparation; Preflight Procedures; Airport and Seaplane Base Operations; Takeoffs, Landings, and Go-Arounds; Performance Maneuvers; Ground Reference Maneuvers; Navigation; Slow Flight and Stalls; Emergency Operations; Night Operation; and Postflight Procedures.

Furthermore, the FAA adopts the proposed amendments pertaining to proficiency checks in 14 CFR part 61. As explained in the NPRM, proficiency checks include a type of review of a pilot's proficiency generally required to maintain existing privileges or to add privileges in the case of sport pilot certificates. A proficiency check differs from a practical test. However, evaluators refer to ACS and PTS when performing pilot proficiency checks. Therefore, the FAA adopts the proposed conforming amendments to the proficiency check requirements in part 61. Specifically, this final rule will require that instrument proficiency checks under § 61.57(d), PIC proficiency checks under § 61.58, and sport pilot proficiency checks under §§ 61.321 and 61.419 occur in accordance with the appropriate ACS or PTS, respectively, through minor revisions to the applicable section and cross-references to the centralized IBR section.

ii. Practical Test Standard Incorporated by Reference Into 14 CFR Part 63

Title 14 CFR part 63 contains the certification requirements for flight crewmembers other than pilots, specifically flight engineers. The standards contained in § 63.39(c) require an applicant for a flight engineer certificate with a class rating to pass a practical test in the class of airplane for which the applicant seeks a rating. Revision of § 63.39(a) conforms to the current practice and specifies that, to pass the practical test for a flight engineer certificate, an applicant must satisfactorily demonstrate the objectives in the areas of operation contained in the Flight Engineer PTS. The Flight Engineer PTS fashions the regulatory subject areas into areas of operation in the Flight Engineer PTS, which expands regulatory subject areas into tasks that list the required knowledge and skills appropriate to the area of operation.[36] Each task lists an objective, which consists of the important elements that an applicant must satisfactorily perform to demonstrate competency. Specifically, the objective includes what the applicant must be able to do, the conditions under which the task is to be performed, and the minimum acceptable standards of performance. As noted previously, the FAA makes the PTS reasonably available to interested parties to view by providing free online public access to the FAA Training and Testing website at *www.faa.gov/training_testing.* Interested parties can download the ACS and PTS free of charge at the provided web address.

iii. Practical Test Standards Incorporated by Reference Into Part 65

Part 65 contains the certification requirements for airmen other than flight crewmembers, including aircraft dispatchers and parachute riggers. Both aircraft dispatchers and parachute riggers must pass a practical test to obtain a certificate and/or rating.[37] Part 65 currently contains a centralized IBR section in § 65.23, which houses the Aviation Mechanic General, Airframe, and Powerplant Practical Test Standards and the Aviation Mechanic General, Airframe, and Powerplant Airman Certification Standard; therefore, this final rule adds the Aircraft Dispatcher Practical Test Standards and Parachute Rigger Practical Test Standards to § 65.23. As noted previously, the FAA makes the PTS reasonably available to interested parties to view by providing free online public access to the FAA Training and Testing website at *www.faa.gov/training_testing.* Interested parties can download the ACS and PTS free of charge at the provided web address.

The standards contained in the IBR section at § 65.59 require an applicant for an aircraft dispatcher certificate to pass a practical test given by the Administrator with respect to any one type of large aircraft used in air carrier operations. Because the aircraft dispatcher practical test occurs in accordance with the Aircraft Dispatcher PTS, § 65.59 will direct compliance with the Aircraft Dispatcher PTS through a cross-reference to the centralized IBR section of § 65.23. The Aircraft Dispatcher PTS contains knowledge and skill tasks that an applicant must demonstrate to pass the practical test for an Aircraft Dispatcher certificate. Specifically, the Aircraft Dispatcher PTS contains areas of operation divided into tasks (*e.g.,* navigation and aircraft navigation systems, practical dispatch applications). Each task lists an objective, which consists of the elements that the applicant must perform satisfactorily to demonstrate competency. Specifically, the objective includes what the applicant must do, the conditions for performance of the task, and the minimum acceptable standards of performance.

Additionally, both a senior parachute rigger and a master parachute rigger must pass an oral and practical test for the issuance of a certificate; likewise, the addition of a type rating to a parachute rigger certificate (*i.e.,* seat, back, chest, and/or lap type rating) requires the certificated parachute rigger to pass a practical test.[38] The Parachute Rigger PTS governs (1) the oral and practical test for obtaining a senior parachute rigger certificate and master parachute rigger certificate and (2) the practical test for obtaining type ratings for seat, back, chest, and lap; therefore, §§ 65.115, 65.119, and 65.123(b) will direct compliance with the Parachute Rigger PTS through a cross-reference to

[36] For example, § 63.39(b)(1) requires the applicant to show that the applicant can satisfactorily perform preflight inspection. Preflight Inspection is implemented in the Flight Engineer PTS as area of operation II: Preflight Procedures, expanded into Task A: Preflight Inspection and Flight Deck Setup and Task B: Preflight Inspection—Exterior.

[37] 14 CFR 65.53(b)(4), 65.115, 65.119, and 65.123.

[38] 14 CFR 65.115, 65.119, 65.123(b).

the centralized IBR section of § 65.23. The Parachute Rigger PTS contains areas of operation (*e.g.,* packing parachutes, parachute operation, and care), which divide into tasks applicable to the certificate and/or rating sought. For example, a task only involved in a seat type rating is delineated as Packing Seat Type Parachute (Seat Type Rating). Each task lists an objective, which consists of the elements the applicant must satisfactorily perform to demonstrate competency. Specifically, the objective includes the ability tested, the conditions under which the applicant performs the task to demonstrate ability, and the minimum acceptable standards of performance. This final rule removes gender references within the aforementioned parachute rigger regulations.

This final rule also makes one related technical amendment in part 65. Currently, as previously stated, the centralized IBR section in part 65, § 65.23, houses both the Aviation Mechanic ACS and PTS. As originally implemented,[39] §§ 65.75 and 65.79 provided that until July 31, 2023, a mechanic applicant must pass a written test including the subject areas on the Mechanic PTS and pass an oral and practical test by demonstrating the prescribed proficiency in the assigned objectives for the subject areas contained in the Mechanic PTS. Effective August 1, 2023, these sections required the written, oral, and practical tests to include the knowledge, risk management, and skill elements, as applicable, set forth by the Mechanic ACS. While the Mechanic PTS was removed from §§ 65.75 and 65.79 upon the effective date of the ACS, the PTS remained in the centralized IBR section. Therefore, this final rule removes the Mechanic PTS from § 65.23 as it is no longer applicable.

B. Discussion of Comments Related to the ACS and PTS

As previously discussed, the FAA provided the draft ACS and PTS documents proposed to be incorporated by reference in the docket for the NPRM associated with this final rule.[40] The FAA received numerous comments on these proposed ACS and PTS. These comments included suggestions and remarks on groupings of ACS and PTS, as well as those specific to a single ACS/PTS. This section of the preamble addresses comments that the FAA considered but did not result in changes to the ACS and PTS and explains the FAA's reasoning for not adopting the changes as suggested or adopting a tangentially related revision related to a specific comment. The first section, Broad ACS Comments (section IV.B.1. of this preamble), responds to comments that are generic in nature to a group of ACS, whether by certificate level or category/class of aircraft. The second section, Specific ACS Comments (section IV.B.2. of this preamble), responds to comments intended to apply only to one ACS or PTS. The last section (section IV.B.3. of this preamble) discusses universally applicable comments noted by industry. For those comments that the FAA agreed with and therefore implemented the suggested change, see section IV.D of this preamble.

1. Broad ACS Comments

i. Airplane ACS

First, Flight Safety International (FSI) commented on the use of the term ''flight manual,'' noting that the FAA's statement in the powered-lift ACS introduction explains what the term means and suggesting the addition of a similar explanation in an introduction to the Airplane ACS.[41] The FAA notes that '' Use of the Term Flight Manual'' appears in the new Powered-Lift ACS introduction section to provide context needed to clarify that flight manual is synonymous language with powered-lift aircraft flight manual in order to facilitate the introduction of a novel aircraft. The generic term of flight manual was used for the powered-lift ACS in the absence of a specified regulatory term for the powered-lift flight manual as a result of rulemaking. The FAA did not implement this change to the Airplane and Rotorcraft ACS as it is already used throughout the CFR.[42]

One commenter suggested limiting preflight assessment in the Private, Commercial, and Flight Instructor Airplane ACS to only elements involving inspection of the aircraft without any elements related to human factors. The commenter stated that duplicated elements make the task unfocused and difficult to learn and assess. The FAA did not revise the ACS in this final rule as an applicant's assessment of the aircraft, airman, and environmental factors are all elements that could affect the safety of flight; therefore, an airman's ability to evaluate him/herself in relation to a flight is as compelling from a safety standpoint as assessing the aircraft and the weather.

Next, the ARAC ACS WG commented on tasks related to runway incursion. The ARAC ACS WG suggested adding a runway incursion avoidance Task in the Private and Commercial Airplane ACS in AOO III, Airplane and Seaplane Base Operations, to align with the dedicated task that exists in the Instructor Airplane ACS. The FAA recognizes the importance of testing of runway incursion avoidance and notes that this topic is included in the private and commercial airplane ACS throughout multiple tasks. Runway incursion avoidance will be tested in at least one of the required tasks. An example of this is AOO II Task C. Taxiing of the Commercial Pilot Airplane ACS, which requires the evaluator to determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with taxi operations, including runway incursion avoidance. The FAA's intention is to mitigate risk by having the instructor applicant demonstrate during the practical test how to deliver training on the elements and techniques for runway incursion avoidance. Once certificated, the instructor will train their students how to avoid runway incursions as an inherent element of providing training on taxiing, takeoffs, and landings. This training should minimize the amount of runway incursions in the future. As a result, the FAA did not create a separate task for runway incursion avoidance in these ACS.

Additionally, the ARAC ACS WG suggested moving the Runway Incursion Task found in the Instructor ACS, AOO II, Technical Subject Areas, to AOO VI, Airplane and Seaplane Base Operations. The FAA did not implement this change in the adopted ACS since evaluators already incorporate this required task in a plan of action.

One commenter suggested removing certain risk management elements in the Human Factors tasks from the Airplane ACS.[43] Specifically, the commenter supported the removal of ''Distractions, task prioritization, loss of situational awareness, or disorientation'' and ''Confirmation and expectation bias'' from the Human Factors Task, as the commenter believed they were vague. The FAA notes that the ACS is intended to communicate and demonstrate risk management as a continuous process that includes identification, assessment, and mitigation of task-specific hazards

[39] *Aviation Maintenance Technician Schools* interim final rule, 87 FR 31391 (May 24, 2022); *Aviation Maintenance Technician Schools* final rule, 88 FR 38391 (Jun. 14, 2023).

[40] FAA–2022–1463.

[41] FSI provided a similar suggestion in relation to the Helicopter ACS; the FAA declined to add an explanation to the Helicopter ACS regarding flight manuals for the same reasons provided herein.

[42] See 14 CFR 21.5, 91.9.

[43] The Human Factors task is set forth in AOO I, Task H in the Private and Commercial Airplane ACS and AOO II, Task A in the Flight Instructor Airplane ACS.

that create risk. The risk management element identifies the circumstantial issues that aviators must consider in association with a particular task. Furthermore, risk management sections in each ACS translate special emphasis items and abstract terms into specific behaviors relevant to each task. Human factors circumstantial issues have been identified by the National Transportation Safety Board (NTSB) incident and accident reports, which include distractions and expectation bias as factors.[44] Furthermore, risk management elements like distractions, task prioritization, loss of situational awareness, disorientation, and confirmation expectation bias are observable risk management behaviors that are required to be evaluated. The references identified within each task provide additional information on the objective and task elements, which includes FAA guidance documents. As such, the Human Factors task found in the Airplane ACS provides reference material that leads to the FAA Risk Management Handbook (FAA–H–8083–2, Pilot's Handbook or Aeronautical Knowledge, and Aeronautical Information Manual (AIM), which aligns with these ACS risk management elements.

Additionally, the commenter also recommended changing the risk element ''aeromedical and physiological issues'' to associate with the first knowledge element of the Human Factors Task—''Symptoms, recognition, causes, effects, and corrective actions associated with aeromedical and physiological issues.'' The commenter stated that this would allow the examiner the ability to select up to three sub-elements and ask the applicant to identify, assess, and mitigate the associated risks with those sub-elements. Currently, the ACS addresses the commenter's concern as examiners must select at least one knowledge element and a risk management element. This allows the examiner to ask the applicant to assess risk related to any knowledge element. The FAA did not make the requested changes to the risk management elements identified in the Airplane ACS Human Factors tasks for the reasons noted above.

The same commenter suggested that the Private, Commercial, and Flight Instructor Airplane ACS return to how slow flight was performed in the Flight Instructor Airplane PTS, as the commenter asserted that the ability to fly an airplane at its absolute minimum controllable airspeed proficiently is far more beneficial than merely avoiding the stall warning because ''pilots will get used to it.'' The commenter also stated that the new method of slow flight implicitly teaches pilots dependence on stall warning devices, which, for many airplanes, is highly inaccurate and advisory at best.

The FAA notes that Safety Alert for Operations (SAFO) 17009[45] identified loss of control in flight to be the leading cause of fatal general aviation accidents in the United States and commercial aviation worldwide. As a result, the prevention of loss of control in flight in general aviation was identified on the National Transportation Safety Board's (NTSB)[46] Most Wanted List of Safety Improvements for 2017. With the release of the Private Pilot—Airplane ACS in June 2016, the FAA revised the slow flight evaluation standard to reflect maneuvering without a stall warning (*e.g.,* aircraft buffet, stall horn, etc.). The FAA explained this change in SAFO 16010[47] as one approach to addressing loss of control in flight accidents in general aviation. One of the primary concerns was that because a pilot would no longer be evaluated while flying at slow speeds with the airplane near the critical angle of attack (AOA), that pilot would not be trained or proficient at maneuvering under these conditions or understand what happens beyond the stall warning. The FAA asserted in SAFO 16010 and maintains the position that a pilot is still expected to ''know and understand the aerodynamics behind how the airplane performs from the time the stall warning is activated to reaching a full stall.'' The FAA also suggested that the pilot can acquire this knowledge in ground training and further consolidate it in the airplane while practicing the Stall Task skills in the ACS. At the time of the publication of SAFO 17009, the FAA reviewed Slow Flight and Stalls AOOs to ensure the knowledge, risk management, and skill elements adequately capture what a pilot should know, consider, and do relative to each task. As a result of that review, the FAA revised the evaluation standards for certain tasks for the private pilot airplane and commercial pilot airplane practical tests. The FAA continues to adopt this rationale and did not implement the requested changes to the maneuvering during slow flight tasks to the Private, Commercial, or CFI Airplane ACS.

One commenter commented on several elements pertaining to electronic flight bags (EFB). First, the commenter suggested making the use of an EFB a separate knowledge element from route planning within the Preflight Preparation AOO since an EFB can be used in other planning calculations. The commenter also suggested removing EFB as a risk element since it is not a significant cause of accidents, incidents, or violations and removing it as a skill element since its use is implicit in S1, Use an electronic flight bag (EFB), if applicable. While the FAA understands the commenter's reasoning for wanting a separate knowledge element for EFB, the intention of the element is for the applicant to demonstrate the understanding of route planning using an EFB if available. The FAA maintains that use of an EFB is most appropriate in the risk and skill portions of the practical test because use of an EFB presents potential hazards. An applicant who supplies or uses an EFB might use it in a manner that can affect the safety of the flight, thereby necessitating training and testing on the skill necessary for its use and the inherent risk of its use. In addition, the skill elements pertaining to an EFB more broadly encompass all use of an EFB by the applicant for planning and navigation.

ii. Helicopter ACS

The FAA received several general comments to the Rotorcraft Category, Helicopter Class ACS that apply to more than one ACS (*i.e.,* suggested changes in the Private Helicopter would result in related changes in the Commercial Helicopter, which could, in turn, have implications for the Flight Instructor Helicopter ACS). This section summarizes and responds to the comments in a generalized fashion rather than duplicate explanations per specific ACS.

One commenter requested a change in the Vertical Takeoff and Landing Task under Hovering Maneuvers (AOO IV, Task A, in both the Private and Commercial Helicopter ACS) to specify the position maintained within 4 feet of a designated point should be with minimal aft movement rather than with no aft movement, as currently required. The commenter stated that it is unrealistic to require no aft movement during the Vertical Takeoff and Landing Task because the applicant may not be able to prevent the helicopter from

[44] See, for example, NTSB Reports: DCA22LA126, DCA18IA081, DCA06MA064.

[45] FAA SAFO 17009, Airman Certification Standards (ACS): Slow Flight and Stalls, May 30, 2017.

[46] NTSB 2017–2018 Most Wanted List of Transportation Safety Improvements, *https://www.ntsb.gov/Advocacy/mwl/Documents/2017-18/MWL-Brochure2017-18.pdf.*

[47] To avoid confusion the FAA has cancelled SAFO 16010, Maneuvering During Slow Flight in an Airplane, and replaced it with a more comprehensive discussion in SAFO 17009, Airman Certification Standards (ACS): Slow Flight and Stalls.

moving aft due to variable or gusty winds, particularly in a light training helicopter.

The FAA notes some components of the Hovering Maneuver, Vertical Takeoff and Landing task is a demonstration of directional control and maintaining a position over the intended hover area, which inherently includes rotor safety considerations. The tail rotor of some helicopters cannot be seen from the cabin, and it can be difficult to judge distance from obstructions. In addition, strong crosswinds and tailwinds may require the use of more tail rotor thrust to maintain directional control. A consideration to be evaluated prior to the flight portion of the practical test is to operate within the limitations of the RFM, as well as the applicant's personal minimums. Personal minimums are evaluated as part of the Preflight Preparation, Human Factors task. Operating within those parameters is a demonstration of risk-based decision making and should give the applicant opportunity to demonstrate mastery of the aircraft. As described in the ACS, evaluators assess the applicant's mastery for specified tasks. The failure to take prompt corrective action when tolerances are exceeded is an example of one typical area of unsatisfactory performance for disqualification of a task. The FAA did not implement this change in the adopted ACS and maintains no aft movement as the level of expected proficiency for the task to qualify for the certificate or rating and maintain the level of safety required in operations.

The same commenter stated the use of the term ''normal'' as it applies to the Normal Approach and Landing Task [48] is arbitrary and may vary given different conditions, obstacles, etc. Specifically, the commenter sought to replace the standard of normal approach angle and rate of closure with ''constant'' approach angle and rate of closure. However, the FAA notes that it uses the term ''normal'' intentionally to account for a range of conditions pilots may encounter. A descent angle is established to provide distinguishing differences between a shallow, normal, and steep approach. The Helicopter Flying Handbook, FAA–H–8083–21, which is listed as a reference for this particular task, describes a normal approach technique as using a descent angle between 7° and 12°, which provides an open range to capture what would be considered a ''normal'' maneuver.[49] This descent angle range of 5° captures the margin of error that can occur with slight variances in a person's normal approach visualized glide angle, but still falls within those parameters. Furthermore, the Helicopter Flying Handbook defines the differences in glide angles for a shallow approach at 3° to 5° and a steep approach at 13° to 15°.

Additionally, the commenter suggested revising an element [50] pertaining to determination of wind direction to remove the option of the use of visible wind direction indicators. The commenter stated that the element, as currently written, is superfluous. The FAA disagrees with the commenter's contention. Helicopters often land and take off from off-airport sites, which requires the pilot to determine wind direction using various means. The element simply provides the pilot the clear option to demonstrate competency determining wind direction with or without wind direction indicators.

The commenter also commented on an element within AOO VI (Performance Maneuvers), Task C: Autorotation with Turns in a Single-Engine Helicopter in both the Private and Commercial Helicopter ACS. Specifically, the commenter stated that the skill element that requires rolling out of the turn no lower than 300 feet above ground level (AGL) along the flight path to the selected landing area should be eliminated. The commenter asserted the element is arbitrary and unrealistic in some situations since training helicopters may begin the autorotation at 500 feet and would not roll out of the turn above 300 feet. The commenter stated that if the FAA felt elimination was not necessary, then the element should simply require roll out no lower than the start of the cyclic deceleration.

The FAA disagrees with the commenter's recommendation to eliminate or alternatively modify this skill element because a lower roll out altitude decision point increases the risk of helicopter accidents during training and practical tests. In response to helicopter autorotation training accidents, the FAA published Advisory Circular (AC) 61–140, *Autorotation Training,* (dated August 31, 2016) which discusses a study conducted by the FAA and the Joint Helicopter Safety Analysis Team regarding helicopter training accidents. The AC outlines several safety recommendations, including a 300 feet AGL decision check with helicopter maneuvering completed before that point and the helicopter properly aligned with the intended landing area. Given the Joint Helicopter Safety Analysis Team findings, the FAA finds the safety recommendation to complete all turns by 300 feet AGL will enhance safety during training and practical tests since this change reduces the tendency of the applicant to rush through the turn and compromise safety during the maneuver.

However, in light of the commenter's concern, and to enable pilots to rollout from turns no lower than 300 feet AGL, the FAA finds it necessary to increase the minimum entry altitude of the maneuver from 500 feet AGL to 700 feet AGL. Accordingly, the FAA amended appendix 3, Operational Requirements, Limitations, & Task Information for ''Autorotation with Turns in a Single-Engine Helicopter'' to reflect a minimum entry altitude of at least 700 feet AGL.

Next, FSI suggested moving the ''Taxiing with Wheel-type Landing Gear'' Task from the Hovering Maneuvers AOO to the Airport and Heliport Operations AOO. The FAA disagrees because an evaluator could ask an applicant who brings a helicopter with wheel-type landing gear to demonstrate the Taxiing with Wheel-type Landing Gear Task on the ground or perform a hover taxi, as well as other related Tasks in the Hovering Maneuvers AOO.

The ARAC ACS WG suggested that autorotation Tasks should not include a testing standard for accuracy of a selected designated point. However, the FAA expects an applicant to select and reach a designated point within a given tolerance as part of an autorotation during a practical test. By choosing the entry point and autorotating to a selected spot, the applicant demonstrates the skill to select and maneuver to a suitable landing point should an engine failure occur, much like a realistic scenario in the national airspace system (NAS).

Finally, the ARAC ACS WG noted that the Helicopter ACS use the terms IIMC or UIMC, which may lead the aviation industry to assume each term has a different meaning. The FAA notes it uses both terms, unintended flight in instrument meteorological conditions (UIMC) and inadvertent instrument meteorological conditions (IIMC) to describe flight in visual meteorological conditions (VMC) continued into

[48] The FAA revised the task name ''Normal Approach and Landing'' to ''Normal and Crosswind Approach'' pursuant to comments, as set forth in the Record of Changes in section IV.D., Table 3 of this preamble.

[49] FAA–H–8083–21, Helicopter Flying Handbook (2019), Chapter 9: Basic Flight Maneuvers, Approaches, Normal Approach to Hover (pp. 9–19).

[50] The FAA notes that these comments specifically reference AOO V, Task G in the Private Helicopter ACS and AOO V, Task B in the Commercial Helicopter ACS, but this element appears in numerous instances throughout all Helicopter ACS.

instrument meteorological conditions (IMC) without the intent to do so. Use of either or both terms can inform the public of how aviation agencies categorize this event. The FAA introduced UIMC in addition to IIMC in the Helicopter Flying Handbook. The FAA understands how confusion could arise and has, therefore, removed the word ''or'' from the affected ACS element and replaced it with a solidus symbol to read ''IIMC/UIMC'' to communicate the interchangeability of the phrases and acronyms.

iii. Powered-Lift ACS

While many commenters expressed appreciation to the FAA for publication of the six Powered-Lift ACS, commenters also noted perceived shortcomings to the Powered-Lift ACS as a whole. Most prominently, Embraer S.A., General Aviation Manufacturers Association (GAMA), Wisk Aero, and Lilium GmbH made similar comments regarding powered-lift and a vertical takeoff and landing (VTOL). The commenters urged the FAA to ensure the certification standards properly train and qualify airmen, while considering powered-lift's imminent entry into commercial operations. However, the commenters indicated that the Powered-Lift ACS series does not address the complexities of every type of VTOL, eVTOL, or powered-lift under development. For context, Lilium specifically provided an example that the required aircraft knowledge related to fuel, hydraulic, and pneumatic systems would not apply to the all-electric Lilium jet, which does not contain these components. As another example, Embraer also expressed concern that multiple tasks under the In-Flight Maneuvers AOO within the ATP/Type Rating Powered-Lift ACS and the High-Altitude Operations AOO within the Commercial Pilot for Powered-Lift ACS may not apply to all powered-lift types.

The FAA notes that it developed the Powered-Lift ACS with the understanding that these novel aircraft will possess varied systems and operating and handling characteristics such that a rigid airman certification framework would be difficult to implement. In other words, the FAA understands the flexibility required of the corresponding ACS for airman certification. For example, powered-lift may be precluded from certain tasks due to the powered-lift's design (*e.g.,* stalls or circling approaches) that would be required by the ACS. Conversely, a powered-lift may be able to perform a maneuver that was not contemplated by the ACS, as adopted in this final rule.

The FAA maintains that the six Powered-Lift ACS, as adopted in this final rule, provide an appropriate practical test foundation for the forthcoming powered-lift operations. GAMA echoed this sentiment in a comment, emphasizing that the documents provide a suitable initial set of standards. Additionally, Joby Aviation acknowledged that the ATP and Type Rating for Powered-Lift ACS are relatively flexible and adaptable to support new and novel technologies. The FAA notes that while industry and working groups provided extensive input and expertise on the Powered-Lift ACS, a degree of uncertainty remains regarding the addition of discrete tasks for certain powered-lift type ratings based on the powered-lift's unique characteristics. Should the Flight Standards Board Report (FSBR) and type certification process reveal any additional tasks not accounted for in the ACS but considered essential to the operation of the specific type of powered-lift, the FAA may set forth these tasks in a type-specific appendix to the ACS, subject to incorporation by reference in accordance with the APA.

On June 14, 2023, the FAA published the proposed rule, *Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes*.[51] This NPRM proposed certain flexibilities in consideration of the differing powered-lift characteristics related to type specific airman certification testing. Upon publication of the NPRM, stakeholders had an opportunity to submit public comments on the FAA's proposal, including these flexibilities. The FAA will consider all significant comments received on the powered-lift NPRM in the final rule and reconcile the powered-lift final rule (and necessary guidance) with this final rule, as appropriate. Once the FAA publishes the powered-lift final rule, the FAA will actively engage with stakeholders to develop or mitigate Tasks and publish guidance specific to differentiating powered-lift types as the FAA and industry work to achieve aircraft certification.

As it pertains to specific comment from Lilium and Joby, the FAA understands the use of the term ''fuel'' rather than the term ''energy'' could lead individuals to reach the conclusion that this term excludes electric propulsion systems. In a prior rulemaking, the FAA stated it did not intend to preclude the certification of electric propulsion systems or other non-fossil-fuel-based propulsion systems, such as provided by certain carbon-based fuels or electrical potential, and the FAA maintains that position now.[52] The term ''fuel systems'' also includes a means of storage for the electrical energy provided (*e.g.,* batteries that provide energy to an electric motor) or devices that generate energy for propulsion (*e.g.,* solar panels or fuel cells).[53] The FAA considers it appropriate to use the term ''engine'' for powered-lift electric motors and recognized this in the first special conditions for an electric engine in September 2021.[54]

Joby stated that elements with applicability qualifiers and references to appendix 3 of the ACS create redundancy and confusion. Specifically, a portion of appendix 3, Equipment Requirements & Limitations, states that an evaluator is expected to test the applicant's knowledge of the systems that are available or installed and operative during the ground and flight portions of the practical test. Joby stated this indicates a pilot should only be checked in accordance with the aircraft's equipment, but that certain applicability modifiers[55] used throughout the ACS introduce confusion by implying items without the modifier are required, even if the aircraft isn't equipped accordingly. Joby proposed the removal of all applicability language from the element and, instead, suggested reinforcement of the applicability of appendix 3 language to all elements.

The FAA did not remove applicability language in the adopted ACS. As previously discussed in this section, the FAA understands that some powered-lift will not be equipped with certain equipment that may be required in these foundational ACS, just as some equipment and elements in airplane and helicopter ACS are inapplicable to some airplanes and helicopter. Additionally, due to emerging technology and active aircraft certification projects, the FAA cannot determine which one statement would be applicable to all powered-lift aircraft and cannot address this issue without more input from stakeholders,

[51] 88 FR 38946.

[52] See *Revision of Airworthiness Standards for Normal, Utility, Acrobatic, and Commuter Category Airplanes* final rule, 81 FR 96572 (Dec. 30, 2016).

[53] For example, § 91.205(b)(9) refers to a ''[f]uel gauge indicating the quantity of fuel in each tank.'' In instances such as this, the fuel tank may refer to the electric battery that stores the energy.

[54] *Special conditions: magniX USA, Inc., magni350 and magni650 Model Engines; Electric Engine Airworthiness Standards* final special conditions, 86 FR 53508 (Sep. 27, 2021).

[55] Joby refers to phrases such as ''as applicable,'' ''if applicable,'' ''if equipped,'' ''if installed,'' ''if available,'' and ''as applicable,'' and similar language.

as intended through an aircraft's certification process and Flight Standards Board. These key processes will inform airman certification frameworks for each specific powered-lift type.

Next, Joby noted that the ACS documents should not introduce new requirements not found in part 61 without also modifying part 61. Joby cited a few examples, including aviation security concerns, required use of safety restraint systems, and passenger safety briefings. Joby stated that these items are already captured more broadly in Area of Operation I, Preflight Preparation, Task E, The Code of Federal Regulations. The FAA did not adopt Joby's recommendation. The FAA seeks to place elements in Tasks where they fit logically as part of an Area of Operation and Task and maintains transparency in knowledge and testing expectations through explicit elements. Specifically, because Areas of Operation in part 61 are extensive in scope and limited in detail, a Task or element might not be referenced in 14 CFR. The items identified by Joby are appropriate elements of preflight procedures, thus FAA has placed them in AOO II, Preflight Procedures, consistent with the same requirements in the airplane and rotorcraft ACS. Because IBR is a process by which content is made regulatory, these items have the same standing as the areas of operation listed in part 61.[56]

iv. Glider PTS

The ARAC ACS WG and Soaring Safety Foundation (SSF) provided a list of suggested changes to the Glider PTS. The FAA notes that several of the items suggested by the ARAC ACS WG and SSF simply set forth revisions without explanation, safety rationale, or data for the requested change. The FAA notes that many elements already encompass the commenters' suggested items.[57] Commenters also suggested amendment of many Fundamentals of Instructing (FOI) elements in the Glider Flight Instructor PTS to align with the Aviation Instructor's Handbook, which the FAA notes is listed as a reference. The Glider PTS is slated to transition to ACS in the future, and the agency may consider these items when collaborating with the ARAC ACS WG to draft the Glider ACS. To note, the FAA agreed with several suggestions and implemented corrections in the Glider PTS adopted with this final rule. These accepted changes are detailed in section IV.D of this preamble.

SSF suggested the addition of clearing procedures in all flight maneuver tasks in the Private, Commercial, and Flight Instructor Glider PTS. The FAA notes while only some Tasks may list that the applicant clears the area before a maneuver, the unsatisfactory performance section of the Glider PTS specifically discusses the failure to use proper and effective visual scanning techniques to clear the area before and while performing maneuvers. Because this is incorporated within the practical test via the appendix, the FAA does not see a need to add the specific element in each task. When the PTS transitions to the ACS, it may be more appropriate to delineate clearing the area as a skill task at that time.

Other SSF comments related to slips with or without the use of drag devices during the skill portion of the Slip to Landing Task. The FAA notes not all gliders have the capability to demonstrate a slip with drag devices extended. Therefore, the Slips to Landing task appropriately tests the airman's knowledge of slips with and without the use of drag devices. Only the skill element requires a slip without the use of drag devices. No justification or safety information was provided with the comment, and the FAA did not make a change.[58]

v. Commercial Pilot ACS

As part of FSI's comments encouraging the FAA to strive for uniformity within the various ACS and PTS, FSI noted inconsistencies pertaining to the Night Operations tasks among the Commercial ACS. Specifically, FSI noted that the Commercial Airplane ACS has no Night Operations task, while the Commercial Powered-Lift ACS has a designated Night Operations task under AOO I, Preflight Preparation, and the Commercial Rotorcraft-Helicopter ACS includes the Night Operations task under AOO IX, Special Operations. The FAA agrees that for uniformity among the ACS Commercial Pilot documents the Night Operations task for both Powered-Lift and Helicopter categories now appear in AOO I, Preflight Preparation. The helicopter and powered-lift aircraft conduct lower altitude operations and off-airport night operations into unprepared landing areas, which involve a higher degree of risk due to an increase in unpredictability compared to standard airport operations. As a result, the FAA included the Night Operations task in the Powered-Lift and Helicopter ACS and did not add it to the Commercial Airplane ACS.

vi. Instrument Rating and Flight Instructor—Instrument Rating ACS

The FAA proposed to incorporate by reference five ACS and PTS to obtain an instrument rating and/or an instrument instructor rating.[59] Similar to the helicopter comments, some commenters suggested revisions for one specific Instrument ACS or PTS that would apply to the entire series of instrument and flight instructor-instrument rating standards. This section summarizes those comments related to the Instrument ACS and PTS and responds accordingly.

First, one commenter stated that the Instrument Proficiency Check (IPC) Task table in the Instrument ACS appendix has no regulatory basis and inappropriately mandates a certain minimum number of Tasks within the corresponding AOOs mentioned in 14 CFR 61.57. The commenter further asserted that the addition of an IPC Task table with specific Tasks should not be part of the ACS/PTS IBR rule and should be a separate rulemaking process to allow comments on the FAA's selection of Tasks. The commenter suggested either (1) removing the IPC requirements from the ACS and issuing a subsequent rulemaking to address the topic of IPC requirements (with content added to AC 61–98 in the meantime) or

[56] If the FAA determined that a testing task was required to determine the pilot's proficiency, but that task did not properly fit under an existing area of operation, the FAA would revise the areas of operation in part 61 to accommodate the new testing task. The FAA most recently did this in the Operations of Small Unmanned Aircraft Systems over People final rule (86 FR 4314, Jan. 15, 2021) when it added night operations and operations over people to the list of knowledge areas for airman certification under part 107.

[57] For example, within the Commercial Glider PTS, the ARAC ACS WG suggested modification of the weather Task to include low-level wind shear conditions and techniques for avoiding them. The FAA notes that evaluators can cover this information when asking the applicant to explain hazards associated with flight in the vicinity of thunderstorms (item 3). As another example, the ARAC ACS WG suggested the addition of self-imposed medical stress in the Aeromedical Factors Task (AOO I, Task F). The FAA notes that item 1.g. (stress and fatigue) within Task F may encompass all types of stress, including self-imposed medical stress. Further, The ARAC ACS WG suggested adding Notices to Air Missions (NOTAMs) as an item in AOO VIII, Navigation, Task B, National Airspace System for the Private and Commercial PTS. The FAA notes that Task B (National Airspace System) in this AOO includes all necessary information for the applicant to function in the NAS and does not exclude NOTAMs.

[58] The SSF referenced an FAA Designee Update from January 2000 published by the FAA in their justification for changes to the PTS; however, the FAA is unable to locate the reference document and, therefore, is unable to determine the proposed wording change.

[59] Instrument Rating—Airplane, Instrument Rating—Helicopter, Instrument Rating—Powered-Lift; Flight Instructor Instrument—Airplane and Helicopter, Flight Instructor Instrument—Powered-Lift.

(2) reissuing the NPRM to solicit comments on the IPC requirements.

As previously explained, § 61.57(d), prior to this final rule, listed the specific AOOs for an IPC. In practice, these AOOs were also set forth in the applicable PTS or ACS with an accompanying task table. Therefore, in the NPRM, the FAA simply proposed to remove the specific AOOs from the regulation itself and, instead, provide a table within the applicable ACS in the appendix with the specific AOOs and tasks to be tested. The footprint of the IPC was neither expanded nor were additional AOOs and tasks added to the IPC ACS and PTS via the tasking table. In other words, the previously required minimum AOOs and Tasks for an IPC remain unchanged. Additionally, the FAA amended the regulatory text for § 61.57(d) to direct a person to the appropriate ACS to identify the requirements for an IPC. Within the appropriate ACS is an IPC task table that identifies the minimum required AOOs and tasks. This change incorporates language to specify the minimum requirements of an IPC, but also allows for additional tasks if the instructor deems it necessary to determine instrument proficiency.

To illustrate, pursuant to § 61.57(d) prior to this final rule, the IPC requirements included at least: air traffic control clearances and procedures, flight by reference to instruments, navigation systems, instrument approach procedures, emergency operations, and postflight procedures. In examining the IPC table in, for example, the Instrument Rating—Airplane ACS, the AOOs/Tasks correspond in the following manner:

TABLE 2—EXAMPLE COMPARISON OF IPC TASKS

Area of operation set forth by § 61.57(d)(1) prior to this final rule	Corresponding AOO/task in the instrument rating—Airplane ACS IPC table
§ 61.57(d)(1)(i): Air traffic control clearances and procedures.	AOO III (Air Traffic Control Clearances and Procedures), Task B: Holding Procedures in Air Traffic Control Clearances.
§ 61.57(d)(1)(ii): Flight by reference to instruments.	AOO IV (Flight by Reference to Instruments), Task B: Recovery from Unusual Flight Attitudes in Flight by Reference.
§ 61.57(d)(1)(iii): Navigation systems	AOO V (Navigation Systems), Task A: Intercepting and Tracking Navigational Systems and DME Arcs.
§ 61.57(d)(1)(iv): Instrument approach procedures.	AOO VI (Instrument Approach Procedures), All Tasks.
§ 61.57(d)(1)(v): Emergency operations	AOO VII (Emergency Operations), Task B: One Engine Inoperative (Simulated) during Straight-and-Level Flight and Turns; Task C: Instrument Approach and landing with an Inoperative Engine (Simulated); and Task D: Approach with Loss of Primary Flight Instrument Indicators.
§ 61.57(d)(1)(vi): Postflight procedures	AOO VIII (Postflight Procedures), All Tasks.

The commenter stated that the tasking table would transform the task table from strong guidance about what the FAA considers a representative set of tasks to affirmative regulations mandating the use of the task table, thereby decreasing a flight instructor's discretion in conducting the IPC. As illustrated in the table, the tasking table does narrow some of the AOOs; however, the evaluator retains discretion to select multiple knowledge and risk management elements within those tasks. Additionally, where the FAA narrowed the area of operation to a task, it does not change the parameters expected of the check. An evaluator would cover such tasks under § 61.57(d)(1) as written prior to this final rule and, therefore, the table does not add any additional requirements to the proficiency check.

Finally, to the extent that the commenter suggested the ACS and PTS documents were not an appropriate means to establish the IPC requirements, because an IPC is designed to ensure that a pilot has maintained the instrument skills required for initial certification, the FAA deems the ACS and PTS the appropriate mechanism to delineate the necessary tasks for an IPC. The FAA notes that this rulemaking extended an opportunity for the regulated community to provide comments related to any and all of the ACS and PTS, which included substantive comments on required tasks and content contained in the appendices.

Relatedly, the ARAC ACS WG commented that § 61.57(d) does not incorporate ACS–8, the Instrument Rating—Airplane ACS, by reference. Based on the comment provided, the FAA could not determine the rationale behind the ARAC ACS WG's perception. The language, as adopted by this final rule, requires that an IPC must include the AOOs contained in the applicable ACS, incorporated by reference by § 61.14 as listed in new appendix A to part 61 appropriate to the rating held. Appendix A to part 61 provides that the Instrument Rating—Airplane ACS, as set forth in § 61.14, applies to a person seeking an Instrument Proficiency Check—Airplane.

Further, the ARAC ACS WG commented on the required tasks set forth by the IPC table pertaining to AOO VI (Instrument Approach Procedures) stating that the IPC table should only require one non-precision approach and not require all tasks in the AOO, which effectively requires evaluation of two different non-precision approaches via Task A and the note regarding that task in appendix 3. As the FAA previously stated, an IPC is designed to ensure that a pilot has maintained the instrument skills required for initial certification. Additionally, it is possible a pilot could be non-current for many years, prior to fulfilling the IPC requirements. As a result, in the interest of safety, the FAA did not change the requirement.

Additionally, the ARAC ACS WG sought confirmation regarding a revision to Localizer Performance with Vertical guidance (LPV) approaches. Specifically, the ARAC ACS WG noted that the testing standard within the published Instrument Rating—Airplane ACS prior to this final rule (FAA–S–ACS–8B) considers the LPV approaches to be non-precision if the Decision Altitude (DA) is more than 300 feet and precision if the DA is less than 300 feet. The ARAC ACS WG stated that the Instrument Rating—Airplane ACS set forth with the NPRM to this final rule (FAA–S–ACS–8C) does not address LPV as in the past and sought confirmation as to whether this change was intentional. The FAA notes that it made this change intentionally to align the Instrument ACS with the criteria in Advisory Circular (AC) 90–107, *Guidance for Localizer Performance with Vertical Guidance and Localizer Performance without Vertical Guidance*

Approach Operations in the U.S. National Airspace System. Because a precision approach includes any approach flown to a DA with approved vertical guidance, the FAA removed the 300 feet height above touchdown (HAT) in all category Instrument ACS and the Flight Instructor—Instrument ACS, as criteria to determine whether an RNAV (RNP) or RNAV (GPS) approach with LPV published minimums could count as a precision approach during a practical test. Appendix 3: Aircraft, Equipment, and Operational Requirements & Limitations for Precision Approach, states that an applicant must accomplish a precision approach to the decision altitude (DA) using aircraft navigational equipment for centerline and vertical guidance and that precision approach is a standard instrument approach procedure to a published decision altitude using provided approved vertical guidance.

vii. Private Pilot PTS

One commenter suggested including elements in the Private Pilot PTS on the subject area of knowledge and proficiency in conducting a post-flight self-review. The commenter contended that post-flight self-checks are important for continued improvement and should include knowledge and proficiency in National Aeronautics and Space Administration (NASA) Aviation Safety Reports, NTSB accident reports, and how the FAA WINGS program can help applicants with improving and maintaining knowledge, skills, and proficiency. The FAA encourages pilots at all levels to continually evaluate their performance before, during, and after any flight operation, but notes that making a post-flight review part of the practical test could affect the post-flight task in all ACS and PTS documents. The FAA also describes a post-flight analysis in the Pilot's Handbook of Aeronautical Knowledge, FAA–H–8083–25, which states, ''when you have safely secured the airplane, take the time to review and analyze the flight as objectively as you can. Mistakes and judgment errors are inevitable; the most important thing is for you [pilot applicant] to recognize, analyze, and learn from them before your next flight.'' This does not prevent a pilot from using additional means of research and resources during their analysis. However, the FAA does not test an applicant's ability to conduct a post-flight self-evaluation at the conclusion of any practical test. The FAA requires the evaluator to perform a post-flight briefing of the applicant's performance.[60] Therefore, adding a standard for an applicant to conduct a post-flight self-assessment, review of aviation safety reporting, or search of the NTSB database would be superfluous to the responsibilities of an evaluator.

2. Specific ACS Comments

i. FAA–S–ACS–11A, ATP and Type Rating for Airplane ACS, November 2023

As part of FSI's broader notation that the ACS in general should align as much as possible in structure, content, layout, and tasks, FSI suggested a number of specific revisions to the ATP and Type Rating for Airplane ACS (referred to as the ATP Airplane ACS for purposes of this section) to encourage uniformity. First, FSI commented that the ATP Airplane ACS does not contain a Removal of VFR Type Rating table while the Powered-Lift ATP ACS does. The FAA notes that the Airplane ATP ACS includes a type rating limited to VFR table for a type rating practical test conducted in aircraft not capable of instrument flight. No table exists for testing to remove this specific limitation as the specific airplane type does not have IFR capability. On the contrary, powered-lift that are capable of instrument maneuvers and procedures present a situation that differs from other categories of aircraft because the FAA has not previously required a type rating for each type of aircraft that falls within a broad category of aircraft. Therefore, the Powered-Lift ATP ACS includes a VFR only table for the purposes of initial certification to coincide with the Powered-Lift NPRM (as previously discussed) that proposes a Special Federal Aviation Regulation (SFAR) for alternate eligibility requirements to safely certificate initial groups of powered-lift pilots. As a result, the ACS documents cannot succinctly align regarding the Removal of VFR Type Rating Table.

FSI also suggested adding flightdeck management to the Airplane ATP ACS for uniformity of content. The FAA notes that the ATP Airplane ACS currently encompasses the flightdeck management concept and includes it throughout the ACS. Examples of flightdeck management are: AOO II, Task C, K6, which requires applicants to demonstrate understanding of appropriate flightdeck activities prior to taxi and AOO I Task E, Air Carrier Operations, which requires applicants to exhibit the skill to apply crew resource management (CRM) principles in a crew environment. As a result, the FAA is not amending the Airplane ATP ACS, as the flightdeck management concept is already present.

One commenter asked for clarification in appendix 3 of the ATP Airplane ACS, specifically pertaining to AOO V., Stall Prevention. Within Tasks A, B, and C, the appendix states that when accomplished in a flight simulation training device (FSTD), stall entries should be consistent with the expected operational environment for a stall in cruise flight with no minimum entry altitude defined. The commenter inquired whether ''expected operational environment'' means something similar to a scenario-based event or actually performing the stall event at the location and operation of flight where the stall would occur (*e.g.,* from the landing configuration stall at the minimum descent altitude for a non-precision approach in IMC conditions). The FAA notes that air agencies and air carriers using FSTDs train stall recovery procedures using realistic scenarios that have no need to meet the altitude recovery limits that apply to practical tests conducted in an actual airplane. Therefore, the note in the appendix simply allows for scenario-based testing of the stall prevention task using an FSTD that mimics real world experiences in an operational environment (*e.g.,* weather, airspace, hazards, etc.) to meet the flight testing objectives without an altitude limitation. In other words, the evaluator should design the scenario such that the stall prevention occurs at a point that provides realistic testing.

The same commenter noted the ATP Airplane ACS appendix 3 contains information pertaining to a part 25 or § 23.3(d) commuter multiengine airplane. The commenter noted that 14 CFR 23.3 is an obsolete regulation. The FAA agrees; however, air carriers and operators still use aircraft certificated under the obsolete regulation and the statement applies to those aircraft. The FAA modified the sentence to clarify that these airplanes were certificated as commuter multiengine airplanes under 14 CFR part 23, historical § 23.3(d).[61]

[60] See FAA Order 8900.1, Volume 5, Chapter 2, Section 1, Paragraph 5–222.

[61] 14 CFR 23.3(d) provided that the commuter category is limited to multiengine airplanes that have a seating configuration, excluding pilot seats, of 19 or less, and a maximum certificated takeoff weight of 19,000 pounds or less. The commuter category operation is limited to any maneuver incident to normal flying, stalls (except whip stalls), and steep turns, in which the angle of bank is not more than 60 degrees. In 2016, part 23 was reorganized pursuant to the Small Airplane Revitalization Act of 2013 (Pub. L. 113–53, 49 U.S.C. 44704 note), resulting in the relocation and revision of § 23.3(d). See *Revision of Airworthiness*

Continued

A commenter suggested using ''must'' instead of ''shall'' in appendix 1 of the ATP Airplane ACS (which would result in a change to all ACS as boilerplate language). The FAA acknowledges that FAA Order 1000.36 (FAA Writing Standards) advises against the use of ''shall'' and recommends the use of ''must'' to impose requirements. The FAA retained the use of ''shall'' in this single instance and notes that it has the meaning set forth in 14 CFR 1.3.[62] Consistent with that meaning, its use constitutes a requirement for examiners.

ii. FAA–S–ACS–17, ATP and Type Rating for Powered-Lift ACS, November 2023

As previously noted, FSI suggested that the content of the ATP ACS for airplane, helicopter, and powered-lift should align as much as possible and, specifically, include second-in-command (SIC) in appendix 1 of the ATP and Type Rating for Powered-Lift ACS (referred to as the ATP Powered-Lift ACS for purposes of this section). While the FAA is in favor of uniformity where appropriate, in this case, the ACS are intentionally designed to be different. The Airline Transport Pilot and Type Rating for Airplane Category ACS specifically addresses a ''Second-In-Command Required'' Limitation that is specific to aircraft that allow for a pilot flight crew compliment of single or dual crew as required by § 61.43(b). This table is not applicable to powered-lift aircraft at this time and therefore not listed in appendix 1 of the ATP and Type Rating for Powered-Lift ACS.

FSI suggested the inclusion of an Air Carrier Operations Task in the ATP Powered-Lift ACS, specifically in AOO I (Preflight Preparation), stating that operators plan to use powered-lift in part 135 operations and most of the knowledge tasks apply to obtaining an ATP certificate in powered-lift. While the FAA understands FSI's reasoning for seeking addition of this task to the powered-lift ACS, the FAA first notes that the air carrier operations task was derived from Public Law 111–216, section 217, to apply to airplane multi-engine operations, specifically. Because the task is narrowly tailored to a different aircraft, the FAA requires additional operating information pertaining to powered-lift before analyzing the applicability of the task into the ATP Powered-Lift ACS. Additionally, powered-lift operations are not yet envisioned for part 121 air carriers. To mitigate the safety risk in part 135 operation, the FAA relies jointly on (1) practical testing with the use of the ACS and incorporation of part 135 regulations (*e.g.,* AOO I, Task E; AOO II, Task A) and (2) the approved part 135 training and checking programs, contemplated by the powered-lift NPRM and forthcoming final rule (as previously discussed). As industry expands into part 121 operations and the FAA garners the requisite information on powered-lift air carrier operations, the FAA may consider adding an Air Carrier Operations Task to the ATP Powered-Lift ACS similar to that in the ATP Airplane ACS.

The ARAC ACS WG commented that the Steep Approach Task and other Tasks specific to landing set forth in the ATP Powered-Lift ACS exist in the Private and Commercial Powered-Lift ACS, and the FAA should not test the same Tasks at the ATP and Type Rating level because it creates redundant testing. The FAA notes that there are some tasks throughout certificate levels that require duplicate testing. Due to the array of differing characteristics and capabilities of aircraft being pursued by industry, as well as pending airman certification pathways, the FAA continues to require these crucial approach and landing maneuvers in each respective certificate level at this time.

FSI made several discrete points suggesting the FAA reorganize the ATP Powered-Lift ACS to align with the ATP Airplane ACS or for preferred categorization under an AOO.[63] Some of these suggestions included removing AOO VI (Landings and Approaches to Landings), consolidating landing and hover tasks within AOO III (Takeoffs and Landings), and retitling requisite AOOs to mirror those ATP Airplane AOOs. The FAA notes this would require a substantial overhaul to include removing, consolidating, and reorganizing both AOOs, tasks, and elements. Changes of this nature would also require further revisions to regulatory text within § 61.157 to align the AOOs. The unique characteristics of airplanes, rotorcraft, and powered-lift, which differ as independent categories of aircraft, require varied AOOs and tasks for airman certification purposes. While the FAA recognizes a desire to have the ACS as uniform as possible across categories and classes of aircraft, the FAA does not find it feasible from an efficiency or safety perspective to overhaul the Powered-Lift ACS as proposed.

Joby remarked that some elements are inconsistent between the ATP Powered-Lift ACS and other ACS documents. Joby questioned why the battery used for propulsion element was only in the ATP Powered-Lift ACS. The FAA notes that the knowledge element ''*Battery(s) used for propulsion-charging, discharging, and condition, as applicable*'' is appropriate for testing at most levels of airman certification for powered-lift and, therefore, added it to the final Private, Commercial, and Flight Instructor ACS.[64] Adding this element provides the level of detail needed to adequately evaluate an applicant's knowledge of this unique topic as this relates to the necessity of electrical energy storage or devices that generate energy for propulsion specific to some powered-lift aircraft and otherwise would not be adequately examined prior to reaching the ATP certificate level. The FAA did not add this element to the Instrument or the Flight Instructor—Instrument ACS as those documents focus on aircraft systems related to instrument flight, as do the other Instrument ACS. In the building block approach to pilot certification, these items would be covered in prior testing (*e.g.,* at the private and/or commercial level).

Additionally, Joby also questioned why distractions, task prioritization, loss of situational awareness, and disorientation were excluded from several tasks. The FAA did not add the risk management element pertaining to the identification, assessment, and mitigation of distractions, task prioritization, loss of situational awareness, or disorientation to each risk management section of the ATP Powered-Lift ACS. The FAA intentionally assigned that element where appropriate throughout the ATP Powered-Lift ACS. The FAA does not use identical and redundant language in each risk management section in an effort to better highlight applicable elements related to distraction in context. This is done to tailor the possible risks to the task rather than facilitate redundancy. For example, some risk management elements include ''passenger distractions'' or ''division of attention.''

Furthermore, Joby also questioned whether ''coordinate with crew, as

Standards for Normal, Utility, Acrobatic, and Commuter Category Aircraft final rule, 81 FR 96572 (Dec. 30, 2016).

[62] Under FAA's rules of construction in 14 CFR 1.3, the term ''shall'' is used in the imperative sense meaning it is a directive or command.

[63] The FAA notes that FSI also made several suggestions to the commercial ACS with this same rationale. This section generally responds to the breadth of uniformity concerns.

[64] This element is in AOO I, Task G. Operation of Systems in the Private and Commercial Powered-Lift ACS and under AOO II, Task E. Flight Controls and Systems in the Flight Instructor ACS.

applicable,'' and ''use SRM or CRM, as appropriate'' were synonymous, as Joby noted inconsistency when one element appeared in some skills but both elements appeared in other skills. The FAA notes the skill element referred to in these tasks specify ''coordinate with crew, if applicable, and complete the appropriate checklist(s) in a timely manner'' and ''[u]se single-pilot resource management (SRM) or crew resource management (CRM), as appropriate.'' The FAA does not find these two skill elements are intended to be synonymous. The first skill element described is specific to the responsibility of checklist usage, while the following skill is specific to SRM or CRM principles, which includes the effective use of all available resources.

Finally, Joby suggested that AOO I, Preflight Preparation, Task E, The Code of Federal Regulations, should apply to all applicants for type ratings, not only be tested during ATP certificate tests. The FAA did not make this change, as the type rating test focuses more on the unique aspects of the specific aircraft type to ensure a person is qualified to act as PIC of that type of aircraft. Additionally, the FAA seeks to reduce redundancy of testing over basic elements. This matches the expectations set forth in the ATP and Type Rating Airplane ACS.

iii. FAA–S–ACS–2, Commercial Pilot for Rotorcraft Category Helicopter Rating ACS, November 2023

Members of the ARAC Helicopter ACS WG and U.S. Helicopter Safety Team collectively submitted comprehensive comments to the Commercial Pilot for Rotorcraft Category Helicopter Rating ACS, some of which were echoed by GAMA.[65] The group summarized their efforts to draft the helicopter ACS to include advancements in aircraft equipment and avionics and expressed concern that the drafts submitted to the FAA did not resemble the drafts that accompanied the NPRM. The FAA duly considered the group's comments and underscores its appreciation to the ARAC ACS WG for their work to continually improve and update the ACS in collaboration with the FAA. As explained in this section, the FAA did not implement some of the suggested changes. However, the table contained in section IV.D. of this preamble illustrates those changes that the FAA felt appropriate to make at this time.

One prominent comment by the group detailed the four additional maneuvers developed by the ARAC ACS WG for their draft commercial helicopter test to ensure the commercial test is more in-depth than the private test: (1) advanced autorotations, (2) flight solely by reference to instruments, (3) recovery from unusual attitudes, and (4) hover out-of-ground effect. The group acknowledged the FAA's addition of unusual attitude recoveries (AOO VII, Task L) as proposed in the FAA's draft ACS. The FAA notes that the Commercial Helicopter ACS adopted in this final rule includes the group's suggested task of flight solely by reference to instruments, as subsequently discussed. This section also contains discussion on the FAA's decision at this time to exclude the two remaining tasks.

Foreword and Appendices. First, the group noted that the foreword in the ACS gives little explanation about the ACS, which it considers significant because the majority of the helicopter community will be transitioning from the PTS testing format to the ACS. Additionally, the group noted that certain appendices have been eliminated, namely the References (formerly appendix 9) and Abbreviations and Acronyms (formerly appendix 10). The FAA did not eliminate this information but simply relocated it. Interested parties can find more information about the use of the ACS within the ACS Companion Guide for Pilots, as well as numerous resources provided by the FAA on the FAA's Airman Certification website.[66] Additionally, the Abbreviations and Acronyms appendix was relocated to section 6 of the ACS Companion Guide for Pilots, and conforming revisions were made within the ACS to ensure consistency in abbreviation and acronym usage. Further, rather than a single page of references for each ACS, the entire set of references moved to section 5 of the ACS Companion Guide for Pilots.

Area of Operation II (Preflight Procedures). The group stated that the skill element within Task D (Before Takeoff Check) requiring an applicant to maintain powerplant and main rotor speed (Nr) within normal limits is nonsensical because the aircraft is not flying during this Task. The FAA notes the Task requires the applicant to first perform the ''Complete the appropriate checklist(s)'' skill element, which includes setting and maintaining the power and main rotor speed within normal limits per the manufacturer's POH or RFM, prior to the helicopter becoming airborne. Therefore, this skill element is feasible for pre-takeoff activity, and the FAA kept the skill element. Helicopters may maintain power and rotor speed in different ways while on the ground and prior to takeoff. In some aircraft, the pilot manages the powerplant and main rotor speed operational limits through throttle manipulation. Some manufacturers will require the pilot to increase throttle to the normal operational range and manually maintain those parameters. Some helicopter manufacturers' ''before takeoff checklists'' include the pilot setting the throttle to the normal operating position and then the aircraft maintains the normal operating limitations while the pilot monitors those parameters in the event conditions require intervention. As part of the before takeoff sequence, pilot responsibility includes maintaining the powerplant and main rotor speeds within the normal operating limits regardless of the design features of the helicopter. Further, the inadequate management of powerplant and main rotor normal operating limits prior to takeoff could result in aircraft damage (*i.e.,* powerplant and main rotor overspeed).

Area of Operation IV (Hovering Maneuvers). The group suggested that various hovering maneuvers should exclude the requirement for an applicant to complete the appropriate checklist because there are hovering maneuvers where checklists do not exist. The group stated that, in turn, this makes the skill superfluous and broad. The FAA retained the skill element of completing the appropriate checklist in the adopted ACS since a practical test determines an applicant possesses the skill to perform all Tasks without missing critical steps. The FAA recognizes that, in certain situations, the helicopter pilot may not have time to review the checklist immediately due to the complexity of the helicopter or the maneuver, or a checklist may not correspond to a particular maneuver in real operations. For this reason, the ACS uses the modifier ''appropriate'' within the skill element.

Area of Operation V (Takeoffs, Landings, and Go-Arounds). The group noted that the FAA used the title ''Maximum Performance Takeoff and Climb'' rather than ''Advanced Takeoff Profile and Climb,'' as set forth in the group's draft. The group stated that

[65] The group, which includes the ARAC Helicopter ACS WG, U.S. Helicopter Safety Team, and GAMA, noted that their comments highlight only the Commercial Pilot Rotorcraft Category, Helicopter Class ACS, but that many of their comments could apply to the Private Pilot Rotorcraft Category, Helicopter Class ACS as well. Because the comments specifically addressed the Commercial ACS, the FAA responded to the comments in the commercial context.

[66] Airman Certification Standards | Federal Aviation Administration (*faa.gov*).

maximum power is not required and the Helicopter Flying Handbook allows for different climb profiles, which seems better embodied by the title set forth by the group. The FAA notes that the skill elements within this Task do not require the applicant to use maximum power, but the takeoff power necessary, or power as specified by the evaluator to maximize the takeoff performance and safely complete the Task. Pilots must take operational considerations into account to minimize the risk of exposure in the H/V diagram when clearing obstacles. The FAA did not implement the change to the term ''advanced'' as this may minimize the risk that applies to similar Tasks and the FAA kept the Task title as published in the NPRM.

Area of Operation VI (Performance Maneuvers). First, the group noted that a study conducted by the U.S. Helicopter Safety Team reported that 30% of helicopter training accidents occur in practice autorotations. Therefore, the group emphasized that the FAA should adequately update and address corresponding autorotation training in the Helicopter ACS, whether in the tasks themselves or in the appendices. The group stated that elements within the Straight-In Autorotation in a Single Engine Helicopter require refinement for safety purposes. Specifically, the group noted that the Helicopter Flight Manual defines a straight-in autorotation as not having any turns; however, the elements under this task imply turns are necessary to avoid undershooting or overshooting. The group urged the FAA to correct this inconsistency by revising the title of the Task to ''Basic Autorotation'' and eliminating certain turning and accuracy skills.

The FAA agrees that AOO VI, Performance Maneuvers, Task B,. Straight-In Autorotations in a Single-Engine Helicopter, describes an autorotation made from altitude with no turns. The Helicopter Flying Handbook includes several factors that affect the rate of descent in autorotations, including bank angle, density altitude, gross weight, rotor RPM, trim condition, and airspeed. It further details the primary ways to control the rate of descent including airspeed and rotor RPM.[67] The term ''maneuver'' may refer to banking or turning and would also include pitch attitude adjustments for airspeed changes to avoid undershooting or overshooting. The FAA agrees that straight-in autorotation entry location and altitude should set task tolerances so the applicant can arrive at the chosen termination point without requiring turning techniques. For clarity, the FAA changed the skill element to remove the word ''maneuver,'' and replaced it with the language proposed in the ARAC ACS WG's Commercial Helicopter draft that stated, ''Compensate for wind speed and direction as necessary to avoid undershooting or overshooting the selected landing area.'' The FAA applied this change to the Private Pilot and Flight Instructor Helicopter ACS for consistency. Further, the FAA maintains the term Straight-in Autorotation describes the autorotation set forth by the elements within the Task most accurately and did not adopt the change to the task name as suggested.

Next, the ARAC ACS WG stated that the Autorotation with Turn Task should test an applicant's ability to make an autorotation with a 90-to-180-degree turn. The group asserted that, while the Helicopter Flying Handbook and ACS as proposed with the NPRM uses the term ''Autorotation with Turn,'' the Handbook defines the most common turns in an autorotation as 90 degrees and 180 degrees. The group notes that ACS proposed in the NPRM requires a turn of 180°, not 170° or 160°, which would be within the parameters of the Handbook's definition of most common autorotation. The group stated that a larger margin is necessary where the Handbook provides a broader range of common autorotations, especially to account for crosswind or ATC corrections and considerations.

The FAA disagrees and notes the applicant may demonstrate an autorotation with turns with either two 90-degree turns in the same direction or one continuous turn of 180 degrees. The Helicopter Flying Handbook generally states the most common types of autorotations as 90-degrees and 180-degrees in the context of two turning options but describes the technique with a 180-degree turn.[68] The FAA expects the applicant to demonstrate the ability to turn the helicopter and complete the maneuver on a reciprocal track from the entry direction. This allows for wind corrections or other considerations to align the helicopter with the intended track to the landing area. To provide clarity, the FAA removed the note from the Autorotation with Turns Task and revised the corresponding language in appendix 3 of the ACS (as well as in the Private Pilot and Flight Instructor Helicopter ACS, where this issue would also apply). The ACS appendix 3 language explains that the 180-degree turn refers to a change in direction with respect to ground track, and not an exact reciprocal heading, which should account for the group's concerns regarding variations in the exact amount of turning on this task.

Next, the group expressed concern that certain tasks pertaining to autorotations are only tested for those persons who bring a single-engine helicopter to the practical test. The group commented that, if an applicant brings a multiengine helicopter to the practical test, they should have trained and tested autorotations in a multiengine helicopter. The group compared the requisite civilian training with that of the United States Army, explaining that military primary training requires power recovery autorotations in the twin engine UH–72.

The FAA notes that autorotations in multiengine helicopters present unnecessary risk. Civilian pilots do not perform autorotations in multiengine helicopters during practical tests due to the powerplant redundancy and the remote likelihood of a dual engine failure in civilian operations. The FAA applies similar logic in multiengine airplane practical testing, where an applicant is not required to simulate failure of all engines. While the FAA does not differentiate between single and multiengine helicopter class, because the autorotation tasks are an integral piece of the practical test and will not be performed in a multiengine helicopter, an applicant who does bring a multiengine helicopter for a practical test would be required to provide a single-engine helicopter to demonstrate the autorotation Tasks, as detailed in appendix 3 of the Helicopter ACS.

The ARAC ACS WG commented that the FAA did not add the group's suggested Advanced Autorotation Task to the Commercial Pilot Helicopter ACS. The ARAC ACS WG noted that they referenced Special Federal Aviation Regulation (SFAR) No. 73,[69] enhanced training in autorotation procedures flight training requirement to create their proposed enhanced autorotations Task. The group explained that the Task, titled Advanced Autorotation, would incorporate the ability to use a variety of techniques to maneuver the helicopter in an autorotation to a specific landing area. The FAA notes

[67] FAA–H–8083–21B, Helicopter Flying Handbook (2019), Chapter 11: Helicopter Emergences and Hazards (p. 11–2).

[68] FAA–H–8083–21B, Helicopter Flying Handbook (2019), Chapter 11: Helicopter Emergences and Hazards (p. 11–6).

[69] SFAR No. 73 was adopted in 1995 (60 FR 11254) to establish special training and experience requirements for pilots operating the Robinson model R–22 and R–44 helicopters in response to the number of accidents involving these models.

SFAR No. 73 requires specific pilot training, in addition to the requirements of part 61, to respond to the high number of accidents involving Robinson model R–22 and R–44 helicopters. However, the FAA does not purport to write testing standards for airman certificates and ratings for a specific make and model of aircraft. Furthermore, elements from the advanced autorotation concept are inherently incorporated into AOO VIII., Emergency Operations, Task B. Powerplant Failure at Altitude in a Single-Engine Helicopter. This task includes skill elements such as maneuvering to avoid undershooting or overshooting the selected landing area, which encompasses autorotation airspeed and rotor RPM combinations as dictated in the RFM for the aircraft used and can include varying bank angle. Therefore, the FAA did not add the Advanced Autorotation task at this time.

Area of Operation VIII (Emergency Operations). As previously mentioned, the group proposed to include additional Tasks in the draft ACS submitted to the FAA. Specifically, the group stressed that inadvertent IMC accidents are a major cause of helicopter fatalities and developed two corresponding Tasks to include in the Commercial level ACS: (1) Flight Solely by Reference to Instruments and (2) Recovery from Unusual Flight Attitudes. The Commercial ACS accompanying the NPRM only included the Recovery from Unusual Flight Attitudes Task, which the group noted was nonsensical to include, given the exclusion of the Flight Solely by Reference to Instruments Task. The group described a safety concern where an evaluator may ask the applicant to perform an unusual attitude recovery without knowing if the applicant could even fly straight and level under the hood.

Upon review, the FAA agrees with the group regarding the relationship between the Flight Solely by Reference to Instruments Task and the Recovery from Unusual Flight Attitudes Task and added the Flight Solely by Reference to Instruments Task to the Commercial Helicopter ACS (as well as the Flight Instructor Helicopter ACS). The FAA concurs that this Task allows evaluators an opportunity to assess an applicant's ability to control the helicopter by reference to instruments before the demonstration of the recovery from unusual flight attitudes Task. The Task provides a safety benefit for those applicants demonstrating the recovery and results in a de minimis addition to the practical test such that it would not substantially expand the envelope of the training and testing.

Miscellaneous. Finally, the group commented that the FAA should have included a Hovering Out of Ground Effect (OGE) Task, developed by the group, for the Commercial Helicopter ACS. The group supported this contention by explaining that commercial pilots generally need to hover OGE in commercial operations, are not taught or tested how to do it, and end up teaching themselves the requisite skills. The group also stated that the importance of performance planning, potential risks, and specific techniques for this maneuver are lost. The group stated that this maneuver occurs in commercial operations, which would indicate that an operator or air carrier could include it in an approved training program, where training tailored for a specific operation may occur. The FAA notes that AOO I, Preflight Preparation, Task F, Performance and Limitations, covers the type of performance planning that would apply to OGE hover. As a result, the FAA would rely on this task, as well as the part 121 and/or 135 approved training programs, to cover this, and did not include this task in the Commercial Helicopter ACS.

iv. FAA–S–8081–18A, Commercial Pilot PTS for Lighter-Than-Air Category, November 2023

One commenter recommended two revisions to the Commercial Pilot PTS for LTA Balloon. Specifically, within AOO VIII, Performance Maneuvers, the commenter questioned why Task F, High Altitude Flight (LBG),[70] only applies to gas balloons (as indicated by the parenthetical LBG within the ACS) since balloons with airborne heaters (''hot air balloons'') can also achieve high altitudes. The commenter further supported the expansion of Task G, Obstacle Avoidance (LBH), and Task H, Tethering (LBH), from balloons with airborne heaters to gas balloons since those types of balloons also avoid obstacles and tether.

The FAA notes that balloon pilot certificates are issued with a limitation for either airborne heater or gas.[71] Traditionally, gas balloons operate at altitudes above most obstacles, while balloons with airborne heaters typically operate closer to terrain. Gas balloons tether as a part of the inflation process, which is captured in AOO V, Task E Inflation, unlike balloons with airborne heaters, where they tether for the purpose of multiple ascents and descents. Therefore, due to the low occurrence of obstacle avoidance and tethering functions in gas balloons, the FAA sees no reason to expand these testing areas to gas balloons. Likewise, while the FAA tests the high-altitude task for gas balloons only, the FAA notes that pilots may fly balloons with airborne heaters at high altitudes. The elements of high-altitude flight for balloons with airborne heat is captured in the AOO III in Preflight Preparation, and AOO VIII, Task J Mountain Flying. The FAA finds, given the predominant operational footprints for gas balloons and balloons with airborne heaters, expanding these testing areas to all balloon applicants is not necessary to determine the proficiency to act as PIC.

v. FAA–S–ACS–25, Flight Instructor for Airplane Category ACS, November 2023

One commenter stated that weather knowledge and understanding is poor among many pilots, including flight instructors, and it is vital for safety for pilots to adequately understand this subject area. The commenter specifically noted that the Flight Instructor Airplane ACS requires the evaluator to select only three sub-elements from K2 or three sub-elements from K3 within AOO III, Preflight Preparation, Task C, Weather Information.[72] The commenter recommended an increase of elements for K2 to include all sub-elements and for K3 to include at least 5 sub-elements. The FAA notes it did not change the requirements within this Task because the sub-elements simply set a minimum standard that the evaluator must select ''at least'' three sub-elements. Evaluators should ask more than the minimum weather elements if needed to determine that the applicant possesses the required knowledge pertaining to weather information within the AOO. This minimum requirement does not restrict the evaluator from selecting additional elements but rather provides flexibility when an applicant demonstrates satisfactory knowledge of that Task. Additionally, evaluators may question applicants on weather information

[70] LBG stands for Lighter-Than-Air, Balloon (Gas); LBH stands for Lighter-Than-Air, Balloon (with Airborne Heater).

[71] See 14 CFR 61.115 and 61.133(b). For both the private and commercial certificate level, the limitation may be removed when the person obtains the required aeronautical experience in the balloon comprising the limitation and receives a logbook endorsement from an authorized instructor attesting to the accomplishment of such experience and ability to satisfactorily operate that sort of balloon.

[72] For reference, AI.III.C.K2 is acceptable weather products and resources required for preflight planning, current and forecast weather for departure, en route, and arrival phases of flight; AI.III.C.K3 is meteorology applicable to the departure, en route, alternate, and destination under VFR in VMC, including expected climate and hazardous conditions.

during various Tasks throughout the ACS (*e.g.,* National Airspace System within Technical Subject Areas, Preflight Assessment within Preflight Procedures) to ensure that an applicant possesses the requisite knowledge and skill pertaining to weather information outside of those sub-elements within the singular Task C.

One commenter suggested removing many of the risk management elements in the Fundamentals of Instructing (FOI) AOO of the Flight Instructor Airplane ACS (AOO I), stating that Task F, Elements of Effective Teaching that Include Risk Management and Accident Prevention, sufficiently covers all risk management for this AOO.[73] Additionally, the commenter suggested revising the skill elements in the FOI AOO to set forth a single skill element for each of the six FOI Tasks. The FAA notes the risk management elements outside of Task F, which include tasks associated with human behavior and communication, the learning process, course development, and student assessment, remain unchanged from the proposed ACS. These risk management areas associated with the other Tasks are necessary to evaluate the overall effectiveness of an instructor. Additionally, the FAA did not combine any skill elements within the FOI AOO in the adopted final draft of the ACS due to the itemization of testing codes, which the FAA discusses further in section IV.C. of this preamble.

The ARAC ACS WG commented that all tasks and elements should be focused on teaching and application of FOI. Specifically, the group stated that some of the tasks have skill elements that state ''deliver instruction,'' others say ''teach,'' others have neither, and the FAA should revise for consistency throughout. The groups suggested revising the stem of the skill elements to state that the applicant demonstrates the ability to either (1) deliver instruction ''by teaching how to:'' or (2) ''apply learning theories, communication techniques, teaching methods, and learning assessment while:'' and then list the skill elements and revise as needed to complete the statement. The FAA notes that a Flight Instructor ACS generally uses skill lead-ins that include demonstration and explanation as opposed to performance alone. However, in certain cases, if skill elements specifically mention teaching or demonstration, the FAA chose a shorter lead-in to avoid redundancy. For example, one skill element AOO X, Task G, Elevator Trim Stall Demonstration uses the lead-in, ''The applicant exhibits the skill to: describe and demonstrate conditions that lead to an elevator trim stall for future avoidance.'' If using the common instructor skill lead-in, the skill would read, ''The applicant demonstrates and simultaneously explains how to: describe and demonstrate conditions that lead to an elevator trim stall for future avoidance.'' As indicated above, the FAA believes that this suggestion is already incorporated in the ACS document and no further modifications are needed.

The ARAC ACS WG suggested limiting demonstration of flight characteristics at various configurations and airspeeds (AOO X, Task B) to ASEL and ASES aircraft only because the task elements were not created to mimic the demonstration of effects of various airspeeds and configurations during one-engine inoperative performance (AOO XII, Task C), which is only applicable to AMEL and AMES. The FAA agrees with the ARAC ACS WG's rationale, and the ACS adopted with this final rule reflects AOO X, Task B, as applicable to ASEL and ASES only.[74] Specifically, the FAA adjusted a global note, which sets forth the Tasks required to be tested in AOO X, to remove Task B as a requirement for multiengine applicants. As an outgrowth of this adjustment, the FAA added skill sub-elements to the corresponding multiengine skill element referenced by the ARAC ACS WG (*i.e.,* Task C of AOO XIII) to communicate the expectations for demonstrating smooth control inputs when transitioning between various airspeeds and configurations.[75]

The ARAC ACS WG requested revisions to § 61.187 (specifically, § 61.187(b)(1) and (2)) to exactly align this regulation with the AOOs in the ACS. The FAA did not revise § 61.187(b) in this final rule. For efficiency, the ACS combined the performance maneuver and ground reference AOOs in § 61.187 and the multiengine operations appears in the ACS generally (with a designator that the Tasks within the AOO apply only to multiengine practical tests), rather than separate ACS per class of airplane. Because the ACS applies to both single-engine (§ 61.187(b)(1)) and multiengine (§ 61.187(b)(2)), the ACS account for both sets of AOOs in cohesion with the regulations.

The ARAC ACS WG commented that the use of the asterisk in the added rating tables was not clear, and the FAA should use ''ALL'' in its place. The FAA disagrees, as use of the word ''ALL'' implies that the applicant would complete all the Tasks in the area of operation in the Instructor—Airplane ACS, which would exceed the Tasks required for the initial rating. The asterisk requires the evaluator to apply at least the required number of Tasks as listed in the Flight Instructor Airplane ACS for an added rating as those required for an initial instructor—airplane rating.[76]

The ARAC ACS WG stated that the Note on AOO II, Technical Subject Areas, Task A, Human Factors, should require the evaluator to assess half the sub-elements and that testing on all sub-elements is excessive. Appendix 1 of each ACS indicates that, if a knowledge element includes sub-elements, the evaluator may choose the primary element and select at least one sub-element to satisfy the requirement, unless otherwise noted in a specific Task. Because the Human Factors Task did not note that additional sub-elements are required, only the primary element and at least one sub-element should be selected by the evaluator. Therefore, the task remains unchanged.

One commenter submitted many comments on the format and layout of the flight instructor ACS. The commenter suggested that all tasks in the Flight Instructor Airplane ACS equivalent to those in the Private and Commercial Pilot Airplane ACS should have identical elements. In other words, the commenter stated the only difference should be the requirement for instructional knowledge in the objective to streamline the organization of the ACS. Additionally, the commenter suggested that the FAA first remove all risk management elements in AOO I, Fundamentals of Instructing, and second include a single skill element requiring the evaluator to evaluate all knowledge elements. The ACS uses a

[73] The risk management element in Task F requires the applicant to identify, assess, and mitigate risk associated with hazards associated with providing instruction, obstacles to maintaining situational awareness during flight instruction, and recognizing and managing hazards arising from human behavior, including hazardous attitudes.

[74] AMEL stands for Airplane Multiengine Land; AMES stands for Airplane Multiengine Sea; ASEL stands for Airplane Single-Engine Land; ASES stands for Airplane Single-Engine Sea.

[75] These sub-elements include demonstrating the skill with landing gear extended, wing flaps extended, landing gear and wing flaps extended, and windmilling propeller on the inoperative engine.

[76] The asterisk designation is important in the added ratings tables for ACS documents that do not require all tasks to be completed. Each AOO and/or task has a note identifying the requirements. The asterisk directs the evaluator to review the note and test accordingly. If ''ALL'' was listed on the added ratings table, then all tasks within the AOOs would be required. As a result, the practical test for an added rating would be more restrictive and burdensome than the initial practical test for that certificate or rating.

common FOI intended to confirm an applicant's ability to provide instruction in general terms that applies to all instruction, similar to the equivalence between the Fundamentals of Instructing Tasks in the respective Instructor PTS. The purpose of the Flight Instructor ACS is to determine if an applicant is able to teach the material in a manner conducive to an applicant's learning and, therefore, requires basic and similar knowledge, risk management, and skill element validation.

Finally, one commenter posed questions regarding the use and evaluation of certain elements in the Flight Instructor Airplane ACS. The commenter's questions generally concerned how the FAA evaluates risk and skill elements that are part of the FOI and what AOOs and Tasks evaluators test on the ground versus in flight (and whether tangential tasks could be combined). The FAA notes that the commenter's questions reference how an evaluator designs a practical test, creates a plan of action, and administers the test. First, in general, while knowledge of FOI theory applies during the ground portion of the practical test, risk and skill elements associated with the FOI may also apply during the flight portion of a practical test for an instructor rating. Next, while evaluators focus on AOOs I through V during the ground portion of the practical test (*i.e.,* the FOI, technical subject areas, a preflight lesson on a maneuver to be performed in flight, preflight planning, and elements of preflight preparation), evaluators may ask questions or observe applicant behaviors that relate to these same subjects during the flight portion of the practical test. Evaluations conducted during the flight portion of the practical test consider whether an applicant meets instructional criteria, provides appropriate technical information, and performs risk management. Prospective applicants should read the ACS Companion Guide for Pilots, ACS Introductory paragraphs, the ACS appendices, and may view FAA online resources to better understand design and administration of practical tests.

The ARAC ACS WG provided an extensive list of suggested administrative changes to the Flight Instructor Airplane ACS that do not change the objectives of the tasks and AOOs. For example, the ARAC ACS WG suggested adding a risk element addressing wrong surface operations to the Runway Incursion Avoidance Task (AOO II, Task C). The focus of this Task is to prevent runway incursions, which should already encompass wrong surface operations that can lead to a runway incursion. As another example, the ARAC ACS WG recommended adding a risk element pertaining to NOTAMs within risk management of the NAS (AOO II, Task G). However, the FAA notes that this topic is already covered in AOO II, Task I. The FAA intends to continue working with the ARAC ACS WG in the future to continually improve the ACS and will consider administrative suggestions for later revisions of those elements.

Additionally, several of these editorial comments by the ARAC ACS WG suggested the FAA reorganize, rename, and resituate tasks within the Flight Instructor Airplane ACS, which would require a substantial overhaul, consolidation, and reorganization of AOOs, tasks, and elements. The FAA understands the desire for uniformity amongst the series of ACS for convenience but notes the ACS consist of independent documents and standards, applicable to different categories and classes of aircraft over multiple certificate levels. Because the requested editorial and organizational changes would not have any impact on safety in the NAS, the FAA only made the changes specified in Table 3, Record of Editorial/Minor Changes, at this time.

vi. FAA–S–8081–9E, Flight Instructor—Instrument PTS for Airplane Rating and Helicopter Rating, November 2023

The Flight Instructor Instrument PTS for Airplane Rating and Helicopter Rating provides a table for the addition of an instrument instructor rating to an existing flight instructor certificate. Specifically, the table lists each possible flight instructor certificate and rating held and then provides the required AOOs and Tasks included on the practical test for an additional rating. The ARAC ACS WG commented that the header ''IA,'' meaning Instructor Instrument—Airplane Rating, was nonsensical because the applicant would already hold that certificate. However, this PTS sets forth the requirements for both a flight instructor instrument—helicopter rating and a flight instructor instrument—airplane rating. Therefore, the table in this PTS serves applicants who may hold an instructor instrument airplane rating, who would follow the ''IA'' header to know what AOOs must be completed for an instrument instructor-helicopter rating; accordingly, the PTS retains the ''IA'' header.

vii. FAA–S–8081–8C, Flight Instructor Glider PTS for Glider Category, November 2023

The Soaring Safety Foundation (SSF) recommended adding a Runway Incursion Avoidance task to the Flight Instructor Glider PTS and stated that the proliferation of motor gliders, both touring and all other types, increases the likelihood of a runway incursion. However, the FAA notes that the introduction to the PTS states that evaluators and instructors must place special emphasis on areas of aircraft operation considered critical to flight safety, which expressly includes a reference to runway incursion avoidance. Because this risk is accounted for in the special emphasis areas, the FAA finds the special emphasis area sufficient. During the transition to ACS, the FAA may relocate this special emphasis area to a risk element, if warranted.

Additionally, the SSF recommended adding a night operations task to the flight instructor PTS only, citing the same reasons as the recommended addition of the Runway Incursion Avoidance task. While the FAA agrees that motor gliders could operate at night if properly equipped, given the small community of night-flying glider pilots and the absence of a task in the Private and Commercial Glider ACS, there is not an urgent safety-sensitive reason to expand the footprint of the flight instructor test without notice and comment at this time. It would also be difficult to require a flight instructor to demonstrate instructional ability for this task when there is no requirement within the pilot PTS for gliders. However, the addition of this task may be considered across all glider certificate levels when transitioning the Glider PTS to ACS in the future if there is a safety-based case to do so.

Finally, the SSF also requested the addition of a high-altitude operations task in the Flight Instructor Glider PTS. Specifically, SSF stated the increased number of high-altitude glider cross-country flights that largely occur between 12,500 feet and 18,000 feet when flying in the mountains warrant a specific task to ensure competency. However, relevant testing on this subject area is already housed under AOO X, Soaring Techniques, Task C, Wave Soaring, which predominately occurs at high altitudes.

viii. FAA–S–ACS–8C, Instrument Rating—Airplane ACS, November 2023

One commenter suggested that the FAA modify the Instrument Rating—Airplane ACS to include the option for

evaluation of filing an IFR flight plan to ensure realistic ATC handling. Currently, the skill element found in AOO I, Preflight Preparation, Task C, Cross-Country Flight Planning, differs from the suggestion in that it would provide the option of creating a navigation plan and actual filing of an IFR flight plan. The FAA did not implement this option in any of the Instrument Rating ACS since the intent of the task is to test the applicant orally and not demonstrate the cross-country in flight and the applicant is tested on ATC handling AOO III, Task A. Additionally, the training required for an instrument rating set forth by § 61.65 requires instrument flight training on cross-country flight procedures performed under IFR when a flight plan has been filed with an ATC facility.[77] The applicant already demonstrated their ability to fly a cross-country in the certificate level they hold. This rating is for the purposes of instrument flight only. The FAA considers that simulated filing of an IFR flight plan on a practical test provides sufficient assurance an applicant can file an IFR flight plan and receive a clearance. As such, the FAA did not make the change in the final ACS.

Another commenter stated that the phrasing used in AOO I, Preflight Preparation, Task A, Pilot Qualifications changed between the original Instrument Rating—Airplane ACS (FAA–S–ACS–8), published in 2016, which used the element ''when an instrument rating is required'' and the Instrument Rating—Airplane draft published in 2019 and maintained in the NPRM draft (FAA–S–ACS–8B and FAA–S–ACS–8C, respectively), which use the phrase ''privileges and limitations.'' The commenter stated that because privileges and limitations only exist for pilot certificates, not ratings, the knowledge element should be changed back to the 2016 phrasing. The FAA did not make a change to the adopted ACS. The terminology ''privileges and limitations'' aligns with part 61. Specifically, § 61.2(a) defines the validity of privileges of a certificate and a rating. When a rating appears on a pilot certificate, the rating itself conveys certain privileges and limitations. For example, a person who has a commercial pilot certificate with an airplane category rating is limited from exercising commercial pilot privileges in a rotorcraft category, helicopter class until they obtain a rotorcraft category, helicopter class rating. The same concept applies to those privileges accompanying an instrument rating (*i.e.,* flight under IFR).

One commenter stated that AOO II, Task A, Aircraft Systems Related to Instrument Flight Rules (IFR) Operations, traditionally focused only on deicing systems and noted that the FAA added knowledge, risk management, and skill elements pertaining to autopilots. The commenter suggested eliminating duplication of elements related to automation between that Task and AOO II, Task B, Aircraft Flight Instruments and Navigation Equipment task. The FAA notes that Task A is specific to aircraft systems related to IFR operations. This area not only includes de-icing systems, but also automatic flight control systems (AFCS) as set forth in the draft ACS. The FAA intentionally added the elements for automation systems given technological advancement and modern aircraft equipage. The purpose of Task B is to test the applicant on the flight instruments and navigation pertaining to IFR operations. The flight instruments correlate to automation; however, the two tasks have two different objectives. Based on these reasons, the FAA is retaining these elements in the final ACS.

The ARAC ACS WG recommended that the FAA remove the requirement for a circle-to-land in the IPC so pilots may complete the IPC solely using an Advanced Aviation Training Device (AATD). The FAA disagrees with this recommendation, as AATD's lack the fidelity requirements for both the visual and motion (no motion system requirement) systems to properly represent the conduct of a circling and landing approach. Pilots need to demonstrate their ability in a realistic environment so that they are prepared to conduct the maneuver in the NAS.[78] It is for this reason that credit is also not provided for landing tasks. To receive accurate training on these tasks, the pilot will have to use an airplane or a full flight simulator (Level B, C, or D).

ix. FAA–S–ACS–6C, Private Pilot for Airplane Category ACS, November 2023

One commenter suggested the FAA remove knowledge of certification requirements from the Private Pilot Airplane ACS, element PA.I.A.K1. Specifically, AOO I, Preflight Preparation, Task A, Pilot Qualifications, requires an applicant to demonstrate understanding of certification requirements, recent flight experience, and record keeping. The suggested change would remove ''certification requirements'' from the element, as the commenter stated that knowledge of the certification requirements is irrelevant for an applicant at the practical test stage and would be more relevant to flight instructors. The FAA disagrees with this removal, as a private pilot applicant should know specific FAA regulations under title 14 Code of Federal Regulations that not only pertain to initial private pilot certification but also pertain to maintaining certification to continue operating privileges (*e.g.,* removal of any certification limitations, adding ratings). While flight instructors provide the required dual ground and flight training and verify the applicant meets the minimum requirements for that pilot certificate, this fact alone does not relieve an applicant from knowing the regulatory requirements for their own continuing certification.

The same commenter suggested the FAA change a skill element found in AOO I, Preflight Preparation, Task D, Cross-Country Flight Planning, to create an aviation plan and file, or simulate filing, a VFR flight plan as directed by the evaluator (specifically, element PA.I.D.S3). The commenter further detailed that some applicants have never filed a VFR flight plan airborne or on the ground. This change would give the evaluator the option to ask an applicant to demonstrate opening and closing a flight plan during the flight portion of a practical test as opposed to only simulating this requirement. The FAA notes that two elements within AOO I (PA.I.D.K4, elements of a VFR flight plan and PA.I.D.K5, procedures for filing, activating, and closing a VFR flight plan), allow an evaluator to determine the understanding and ability of an applicant to create, file, open, and close a VFR flight plan. The FAA did not modify the ACS as suggested, as this task corresponds with the oral portion of the practical test that occurs prior to flight, and the applicant would demonstrate this task as a simulation.

One commenter suggested that the Tasks in the AOO for Basic Instrument Maneuvers (AOO VII) should be moved to Emergency Procedures because the focus of basic instrument maneuvers should be to enable a non-instrument rated pilot to successfully avoid and, failing that, recover from inadvertent IMC. The commenter stated that the location of the tasks will more appropriately emphasize the purpose of the training. The FAA agrees with the commenter that emergency procedures may situationally necessitate basic instrument maneuvers and, therefore, would involve both AOOs. However, the FAA did not make the resulting change in the adopted Private Pilot

[77] 14 CFR 61.65(d)(2)(ii).

[78] See Advisory Circular 61–136B, appendix E.

Airplane ACS because tasks pertaining to basic instrument maneuvers appropriately prioritize within their own AOO. Additionally, this AOO corresponds to the regulatory AOO for Basic Instrument Maneuvers as set forth by § 61.107(b)(1)(ix) and (b)(2)(ix). When creating a plan of action, the evaluator can combine tasks into one scenario to address the commenter's suggestion.

The ARAC ACS WG suggested the addition of a note to clarify whether applicants can use avionics-generated information to provide a destination estimate for the initial or revised estimate during the Pilotage and Dead Reckoning Task within AOO IV, Navigation. The ACS and PTS create requirements for certification, and the FAA handbooks and guidance provide accepted methods of compliance. In accordance with a reference listed for this Task, the Pilot's Handbook of Aeronautical Knowledge [79] defines pilotage as navigation by reference to landmarks or checkpoints. The guidance explains that, due to safety concerns in the event of electronic navigation failure, applicants should have the ability to use pilotage and dead reckoning for navigation. While the FAA accepts using a computer-generated initial estimate as part of flight planning, this Task provides the applicant an opportunity to demonstrate basic understanding of the speed, time, and distance relationship using realistic estimates without the benefit of satellite or ground-based electronic navigation equipment. The FAA did not add a note to the pilotage and dead reckoning task for avionics-generated information to provide a destination estimate since the FAA's handbook definition of pilotage and dead reckoning does not involve the use of GPS or electronic navigation.

The ARAC ACS WG suggested adding Tasks from AOO IX, Emergency Operations, Tasks E, F, and G (involving engine failures/inoperative engines specific to multiengine airplanes) to the requirements for an added multiengine sea rating based on the applicant already holding a multiengine land rating. In the absence of safety data requiring additional emergency operation testing for an airplane multiengine sea added rating, the FAA maintains that these Tasks have sufficient commonality in required maneuvering between AMEL and AMES and, therefore, did not require the emergency operation testing for an added multiengine sea rating.

The ARAC ACS WG suggested changing a skill element for the Emergency Descent Task (AOO IX, Task A) to reference the Airplane Flying Handbook (FAA–H–8083–3) and the airplane flight manual (POH/AFM). However, the Task lists the Airplane Flying Handbook as a general reference and the POH/AFM as a specific reference within the element itself. These references provide applicants with the opportunity to develop familiarity with that handbook information regarding an emergency descent. During a demonstration of an emergency descent, the FAA expects applicants to follow the manufacturer's guidance (*i.e.,* the POH/AFM) as the most tailored information to that aircraft.

x. FAA–S–8081–32A, Private Pilot PTS for Powered Parachute Category and Weight-Shift-Control Aircraft Category, November 2023

Members of the ARAC ACS WG noted that the Private Pilot PTS for Powered-Parachute and Weight-Shift Control lacks elements related to risk management. The FAA notes that the PTS uses special emphasis areas that apply globally to PTS Tasks to address risk mitigation. In addition, the section on unsatisfactory performance discusses failure to use proper and effective visual scanning techniques to clear the area before and while performing maneuvers. While the FAA made minor changes to PTS documents published as part of the NPRM, the FAA considered it appropriate to develop risk management elements within each Task when converting the PTS to an ACS through the collaborative process established within the ARAC ACS working group, especially where no safety concerns were identified by the commenters to justify an addition as part of this rule.

xi. FAA–S–8081–17A, Private Pilot PTS for Lighter-Than-Air Category, November 2023

One commenter recommended inclusion of an additional ratings task table for applicants seeking a balloon rating. The FAA notes the PTS that accompanied the NPRM had not been converted into ACS and were largely unchanged from their pre-NPRM version. As a result, the FAA did not create the additional ratings task table during this rulemaking. The FAA intends to consult with members of the ARAC ACS WG prior to proposing an additional rating task table for future revisions.

xii. FAA–S–8081–10E, Aircraft Dispatcher PTS, November 2023

The ARAC ACS WG provided extensive comments regarding the Aircraft Dispatcher PTS and aircraft dispatcher certification in general. The FAA found many of these comments and suggestions, such as raising minimum enrollment requirements, increasing training hours, and reducing items unique to pilots, outside the scope of this rulemaking. However, in this section, the FAA responds to the comments pertaining to the Aircraft Dispatcher standards, currently in the form of a PTS and planned for conversion to an ACS in the future. See section IV.D., Table 3 Editorial/Minor changes of this preamble for editorial/minor changes made to the Aircraft Dispatcher PTS.

One comment suggested removing certain elements from the Aircraft Systems, Performance, and Limitations Task in the Flight Planning/Dispatch Release AOO. Specifically, the commenter recommended removal of elements corresponding to weight and balance because the commenter contended that these issues have been removed from the knowledge test. The FAA notes that the dispatcher knowledge test does have weight and balance questions, and the FAA will continue to support questions for those enumerated elements within the PTS (eventually ACS). Additionally, an applicant must demonstrate skill in the areas of knowledge specified in appendix A of part 65, which includes weight and balance. As a result, the FAA maintains the elements that require the applicant to compute weight and balance and determine limits, which directly impacts aircraft performance for all phases of flight.

The commenter further suggested removing elements related to marker beacons, Automatic Direction Finder (ADF), and Doppler Radar in AOO I, Flight Planning/Dispatch Release, Task F, Navigation and Aircraft Navigation Systems. The FAA did remove doppler radar and marker beacons from the NPRM version of this PTS. However, the FAA does not agree with removal of automatic direction finder (ADF). Because low altitude airways in the NAS rely on non-directional beacons, aircraft dispatchers may reference these routes, and some aircraft may track these routes using an ADF or Radio Magnetic Indicator (RMI). The FAA's current U.S. Terminal Procedures Publication (TPP) contains Non-Directional Beacon (NDB) approaches, which require an appropriate display.

3. Universally Applicable Comments

i. ARAC ACS WG Comments

The ARAC ACS WG submitted extensive comments to the NPRM and

[79] FAA–H–8082–25.

various ACS and PTS. Discussion of a number of these comments occurred within sections IV.A. and IV.B. of this preamble. Additionally, the FAA adopted many of the ARAC ACS WG's suggestions in the ACS and PTS accompanying this final rule, detailed in Table 3 of Section IV.D. of this preamble. The FAA offers the following responses to the ARAC ACS WG comments.

The ARAC ACS WG suggested several formatting revisions, such as a change from tables to lists, numbering of the ACS appendix tables, and clarifying section headers. The FAA maintained the format of the ACS as proposed in the NPRM and notes that clear titles appear above each chart, followed by a brief description of the chart's purpose for each ACS, as well as within the body of the ACS themselves. In its continuing collaboration with the ARAC ACS WG, the FAA will consider recommendations and implement any changes that the FAA determines will improve the readability and understanding of the ACS documents.

The ARAC ACS WG questioned whether a determination that an applicant or certificate holder has met certain English language requirements applies only to the practical test or to an IPC as well. The ARAC ACS WG referred, specifically, to certain content in the ACS that requires an evaluator to determine whether an applicant meets the FAA Aviation English Language Standard (AELS). The ARAC ACS WG seems to contend that the text should clarify English requirements, as the ACS states it only applies to evaluators administering a practical test, which does not include an IPC. The FAA examined this language and determined that the paragraph in question does apply to a practical test, evidenced by terminology and phrasing such as ''applicant,'' ''before starting the practical test,'' and ''discontinue the practical test.'' However, the FAA neglected to include checking, as explained in AC 60–28B, in the ACS AELS section of appendix 1 and pointed out by the ARAC ACS WG. As a result of the review, the FAA updated appendix 1 of each ACS to include a practical test and regulatory checks (*e.g.,* IPC or pilot-in-command proficiency check). The evaluator conducting testing, training, or any required regulatory check should evaluate if the applicant for an FAA certificate or holder of an FAA certificate demonstrates the FAA AELS.

Next, the ARAC ACS WG suggested that sample airman knowledge test questions need to have representative questions reflecting the ACS coding on actual tests to accurately reflect what an applicant missed on the practice exam. The ARAC ACS WG stated that this, in turn, will aid applicants, instructors, and evaluators in discrete identification and training on specific missed elements. The FAA currently provides codes for the sample knowledge test questions related to an ACS. As PTS convert to ACS, the FAA works to ensure it updates the sample test bank and will continue to do so as an outgrowth of this rulemaking. Additionally, many independent sources, as well as the FAA's contracted vendor for knowledge testing, PSI Services, LLC, have practice tests available where users can receive sample test reports and ACS codes. However, because these practice tests are not authored or administered by the FAA, the FAA cannot commit to future efforts to tie test reports to the ACS codes in those instances.

Lastly, the ARAC ACS WG suggested revisions to part 141 to align with the revisions to part 61. Specifically, the ARAC ACS WG stated that the NPRM is inaccurate in its statement that the AOOs for testing, whether under part 61 or part 141, will be governed by areas of operation in the applicable ACS or PTS. The ARAC ACS WG sought clarity in both § 141.67(c) and appendix E.4.(c) to part 141 to align the AOOs with part 61 and the ATP ACS.[80]

As discussed in the NPRM, the FAA contemplated the proposal of conforming amendments to part 141 to reconcile the proposed changes in part 61. However, the FAA did not propose any revisions to part 141. In other words, applicants from a pilot school (or provisional pilot school) either take the practical test or an end-of-course test given by a pilot school that holds examining authority. The practical test under part 61 would align with the applicable ACS by direct reference in part 61: §§ 61.14 and 61.43, as adopted. The end-of-course test would align with the applicable ACS through the cross-reference in § 141.63(c), without need for further amendment because § 141.67(c) already requires such end-of-course test to be equal in scope, depth, and difficulty to the comparable practical test prescribed by the Administrator under part 61 (*i.e.,* the practical test that aligns with the applicable ACS by regulation).

As stated in the NPRM, the FAA acknowledges that the areas of operation in part 141, appendix E, section 4.(c) will not precisely align with the areas of operation set forth in § 61.157(e) as adopted in this final rule. The FAA considered making conforming amendments to part 141 appendices in this rulemaking; however, the concern for unintentional administrative repercussions to part 141 pilot schools and approved training curriculums that would be outside the scope of this rulemaking outweighed the aspiration for consistency at this time.

ii. Other General Comments

Outside of the ARAC ACS WG comments, many commenters' statements were general in nature. This section addresses general comments regarding ACS and PTS across a broad range of aircraft.

One commenter questioned how incorporating the ACS and PTS by reference would affect the referenced material with each task (*e.g.,* other regulations, ACs, Handbooks, Flight Manuals, etc.). The FAA notes that secondary references included in a document incorporated by reference are not considered regulatory unless another mechanism has made them so.[81] For example, a secondary reference to an Advisory Circular is not regulatory because an Advisory Circular is guidance by nature. Conversely, a secondary reference to a specific 14 CFR section would be regulatory because it is adopted into the CFR. Therefore, incorporation by reference does not reach to the reference material listed under each Task heading in all ACS and PTS unless another mechanism makes the references regulatory. In the event of a conflict between secondary references and the ACS and PTS, the ACS and PTS would control, as the secondary references, unless made regulatory through other means, only constitute guidance.[82] Because these references and other guidance in existence do not

[80] 14 CFR 141.67(c) requires tests given by a part 141 school that holds examining authority to be at least equal in scope, depth, and difficulty to the tests prescribed under part 61. Appendix E to part 141 prescribes the minimum curriculum for an airline transport pilot certification course for the following ratings: airplane single engine, airplane multiengine, rotorcraft helicopter, and powered-lift. Section 4.(c) in the appendix requires an approved course to include flight training on the AOOs listed in that section.

[81] The Office of the Federal Register contemplated the inclusion of secondary references in material that has been incorporated by reference and declined to extend its regulatory purview to allow for IBR of secondary material merely referenced in the primary document. See *Incorporation by Reference,* 76 FR 66267, 66275 (Nov. 7, 2014).

[82] The commenter specifically noted that Lighter-Than-Air Balloon Manual PTS, which lists the balloon flight manual as reference and notes that no regulation exists requiring a balloon to have a flight manual. The FAA lists a flight manual in the Lighter-Than-Air Balloon as a reference only to contemplate a balloon that does have a flight manual as a resource for applicants and DPEs for that specific task. If a flight manual does not exist, then that reference would simply not apply.

require an applicant seeking a certificate or rating to complete specific tasks and maneuvers to a minimum given standard to obtain the applicable certificate or rating as the ACS and PTS do, the FAA did not incorporate those documents by reference in this rulemaking.

Additionally, the commenter stated that rather than using incorporation by reference for the PTS and ACS, the FAA should move to a testing standard model like that of the Financial Accounting Standards Board, where an independent entity of experts provides generally accepted accounting standards. The commenter conceded that these standards are authoritative and without IBR as law with the Securities and Exchange Commission (SEC). The FAA does not purport to be an expert in regulation by other Federal agencies but notes that it considers these standards to satisfy the criteria in section 108 of the Sarbanes-Oxley Act of 2002 as generally accepted for purposes of federal securities laws. The FAA does not find that this model translates to airman certification as the commenter suggests. The FAA drafted and revised ACS and PTS in collaboration with industry affiliates. Rulemaking further enhances and facilitates a broad range of input and provides an equal opportunity for any interested party to provide comments for consideration. However, the FAA possesses the statutory authority under 49 U.S.C. 44702 to issue airman certificates when the Administrator finds an individual qualified for and able to perform the duties related to the position authorized by the certificate. The FAA does not find it appropriate to allow outside parties to maintain a performance-based approach to certification standards whereby an outside entity may create an independent framework to certification. Further, consideration of an overhaul to the certification system of this nature falls outside the scope of this rulemaking.

One commenter provided extensive feedback on the broad concept of risk management elements within the ACS. Specifically, the commenter stated that risk management elements should only be tailored to those subject areas that have historically been common causes of accidents, incidents, and/or violations to ensure an objective practical test. The commenter stated that the addition of risk management elements, as well as the open-ended phrasing and lack of guidance material, creates a subjective, overwhelming, and unreasonable testing standard that does not enhance aviation safety and, rather, makes learning and evaluation more difficult. The commenter provided several examples to support the position that the risk management elements may seem to pose a significant risk but, in actuality, do not pose such a risk; the commenter offered the element of ''unexpected runway changes by ATC'' to support this contention. Specifically, the commenter stated that this element is required in the Private Pilot ACS, but that is not a threat until a pilot is operating an aircraft at an ATP certificate level.

The FAA recognizes that each of the ACS contains many risk management elements. However, the FAA does not agree that regulatory testing should only include risk management elements that have objectively resulted in accidents, incidents, and/or violations. A risk, by definition, includes the composite of the predicted severity and likelihood of the potential effect of a hazard; therefore, an action cannot require a fixed standard or minimum of a certain level of accidents or fatalities as the only benchmark to be considered as ''risky.'' If the FAA only included those risk factors identified through accident or incident data, it could unintentionally remove a risk management element that succeeds in keeping the accident and incident rate low in that particular area, thereby creating greater risk (*i.e.,* training and testing on a certain risk management element could explain a lack of accidents/incidents attributed to that risk management element). Conversely, many accident/incident reports may attribute a cause to one area when multiple causes affect an outcome. As the regulator of the NAS, the FAA seeks to ensure pilots train and test to the highest standard of safety and finds that the risk management elements equip pilots with the knowledge and strategies to (1) reduce hazardous situations in the NAS and (2) mitigate situations when they do arise.

While some risk management elements may seem duplicative or redundant, the vast array of unique piloting scenarios and challenges may require a pilot to consider the same hazards at multiple instances. The FAA agrees that the number of risk management elements in the ACS exceeds the number of Special Emphasis items in the PTS; however, the FAA intended this development. The PTS has long required the evaluation of knowledge and risk management elements in both the ground and flight portions of the practical test. The ACS acts as a better tool because it clearly defines these elements and organizes them in the context of phases of flight rather than broadly scoped risk identification. As the commenter pointed out, the risk management element of ''collision hazard'' is often parroted throughout the ACS. However, with mastery of the knowledge and skill of, for example, recovery from unusual flight attitudes, emergency descent, or night operations, the ACS ascertains that a pilot should be proficient at identifying any resulting collision hazards.

Additionally, the FAA authored the Risk Management Handbook [83] as guidance to help recognize and manage risk. Specifically, applicants and instructors may use the handbook as a tool to identify potential flight hazards, assess the hazard, and mitigate associated risks. ACS tasks reference this Risk Management Handbook, and it provides context, expansion, and case studies on several risk management elements. For example, many of the ACS include risk management elements specific to fuel planning (*e.g.,* Private Pilot for Airplane Category ACS AOO I: Preflight Preparation, Task D: Cross-Country Planning, risk management element 6: the applicant can identify, assess, and mitigate risk associated with fuel planning). The Risk Management Handbook sets forth a hypothetical scenario in which a reduced fuel load due to additional weight requires a risk assessment of fuel stop planning, alternate landing destinations, fuel efficiency due to weather and/or altitude, etc. While the FAA agrees with the commenter that the handbook does not have a specific scenario for every risk management element, the handbook provides a foundation of analytical tools a pilot could apply to the complexities of risk mitigation. During a practical test, the element of subjectivity may decrease insofar as the applicant may also test on their awareness, mitigation, and consideration of elements in the context of a separate task or maneuver in the operating environment.

Finally, the FAA notes that, in collaboration with the ARAC ACS WG, it revised the risk management elements from identification of negative action (*e.g.,* failure to do something) to simply identification of the area within which an applicant could analyze risk. The actual risk involves hazards associated with the action, rather than failure to do something specific, as a pilot's failure to do something may not be the only time risk presents itself in a scenario (*e.g.,* collision hazards, a system malfunction). The FAA expects applicants to demonstrate knowledge of hazards and risks associated with a Task

[83] *https://www.faa.gov/regulationspolicies/handbooksmanuals/risk-management-handbook-faa-h-8083-2a.*

and to demonstrate the aeronautical decision-making ability to mitigate risks that develop during the practical test, including those risks inside and outside of a pilot's control (or failure to maintain control).

GAMA, members of the ARAC ACS WG, and several individual commenters urged the FAA to continue working with the ARAC ACS WG to continue fostering a collaborative environment with the airmen training and testing regime. GAMA specifically encouraged the FAA to task the ARAC ACS WG with the continuation of its work to support the agency's experts in managing and modernizing the airman certification framework. Additionally, these groups expressed concern regarding communication between the ARAC ACS WG and the FAA due to ex parte limitations during a rulemaking. Further, GAMA would like the FAA to provide a clear schedule for development to assist the industry.

First, the FAA notes it does not intend to disengage from the ARAC ACS WG and plans to continue working together on further ACS publications and safety-related matters. Specifically, the FAA expects the ARAC ACS WG and the FAA to collaborate in the conversion of the remaining PTS to ACS, refinement of the active ACS, and incorporation of future developments in aviation innovation within the airmen certification framework. The ARAC ACS WG development process does not need to change simply because the FAA must make ACS documents regulatory through the IBR process once they are submitted to the FAA by ARAC.

Because the ACS and PTS attain regulatory status upon the effective date of this final rule, any revisions made to the documents will require rulemaking. While this benefits the regulated community in that it will clearly inform and define the revisions in a given ACS or PTS that the regulated community must adhere to, it also means that the FAA and the regulated community, including the ARAC ACS WG, must heed ex parte considerations [84] upon the commencement of the rulemaking. The FAA notes that this does not mean all communications would halt with the ARAC ACS WG and/or other interested industry parties. Rather, the FAA simply cannot discuss or negotiate the substance of that particular rule with an outside party without providing the same opportunities to all members of the regulated community. For example, if the ARAC ACS WG submitted a recommendation with the Commercial Pilot Airplane ACS through ARAC and the FAA concurred and commenced a rulemaking, the FAA would follow the Department of Transportation (DOT) requirements and guidance on ex parte contacts during informal rulemaking.[85] However, this limitation would not necessarily keep the FAA from continuing to collaborate with the ARAC ACS WG on matters unrelated to the rulemaking, for example, the Private Helicopter ACS. Additionally, the FAA could meet with interested parties to receive information and may ask clarifying questions, as long as such meetings are appropriately memorialized and promptly docketed. Finally, the FAA cannot commit at this time to a clear schedule of the PTS to ACS transition or provide a concrete revision cycle but will collaborate on timelines with the ARAC ACS WG based on revision priority and resources.

Finally, one commenter suggested some general changes to the weather task elements throughout all of the ACS. The commenter first recommended removing the weather depiction chart as obsolete, which the FAA agrees with and has made the change in the appropriate ACS (see section IV.D., Table 3, of this preamble for weather-related element changes, including other weather charts as referred to by the commenter). Additionally, the commenter generally disagreed with itemizing the weather-related products throughout the ACS and suggested that, if itemization was necessary, the FAA reorganize the element as observation, analyses, forecasts, and in-flight weather advisories. While the FAA has maintained the general itemization of those weather elements to provide specific feedback for applicants on knowledge tests and to allow applicants, instructors, and evaluators to focus on specific incorrect knowledge elements related to weather products and resources, the FAA updated ACS to maintain currency with aviation products.

C. ACS Testing Codes

As previously discussed, the FAA is in the process of converting the PTS to ACS. Since this endeavor began in 2011, a number of PTS have, in fact, been converted into ACS and are utilized today as the testing standard. However, as part of this rulemaking, the FAA proposed revisions to existing ACS in addition to incorporation by reference. As a result, some ACS element codes were revised. The ACS codes for these elements serve as the link between the airman knowledge test and the practical test. Specifically, the FAA assigns an ACS code to every knowledge test question. When a person answers a question incorrectly on an airman knowledge test, the ACS code associated with that test question appears on the applicant's knowledge test report so that an evaluator may include the ACS element on the practical test. Additionally, pursuant to § 61.39(a)(6), an applicant must obtain an endorsement from an authorized instructor certifying that the applicant demonstrated satisfactory knowledge of the subject areas shown as deficient on the airman knowledge test. Therefore, the accuracy of these codes ensures that an applicant has the required knowledge before receiving a certificate.

Because the ACS elements link to an ACS code, as existing ACS are modified, ACS codes may undergo revision. Specifically, ACS codes will be added when ACS elements are added to tasks under areas of operation. Further, the addition of ACS elements could create a shift in ACS codes for subsequent ACS elements. Conversely, ACS element codes may archive when the FAA removes ACS elements from tasks under areas of operation. Given that airman knowledge report and associated test codes remain valid for 24 months or 60 months,[86] shifting ACS element codes could create problems in the accurate identification of ACS elements trained and endorsed under § 61.39(a)(6) and tested by the evaluator.[87] The ARAC ACS WG commented on this potential problem with revised ACS, stating that the FAA needs a way to convey what subjects correspond to the ACS element code on the Airman Knowledge Test Report to ensure the correct retraining takes place should ACS code shuffling occur.

The FAA notes that it proposed four revised ACS with the NPRM that contained reordered elements: Private Pilot for Airplane Category ACS, Commercial Pilot for Airplane Category

[84] See 49 CFR 5.5. See also Guidance on Communication with Parties outside of the Federal Executive Branch (Ex Parte Communications), April 19, 2022; *https://www.transportation.gov/regulations/memorandum-secretarial-officers-and-heads-operating-administrations.*

[85] The FAA notes that, in accordance with the APA, the regulated community would have an opportunity to comment within that rulemaking docket, similar to this IBR process.

[86] See § 61.39(a) prerequisites for practical tests.

[87] The FAA notes that some commenters suggested reorganization of tasks and elements for alignment purposes across certain ACS. For example, Flight Safety International commented that tasks in the Preflight Preparation Area of Operation should be reorganized to align the ATP and Type Rating Airplane, Helicopter, and Powered-Lift ACS and PTS. The FAA declined to revise tasks solely for the purpose of alignment where this would result in major changes to the testing codes.

ACS, Instrument Rating—Airplane ACS, and ATP and Type Rating for Airplane Category ACS. As noted by the ARAC ACS WG, these revisions resulted in code shuffling,[88] which the FAA corrected in the versions of these ACS incorporated by reference. Additionally, the ARAC ACS WG suggested additional detail within certain elements of ACS. Breaking out elements could create a disruption in the middle of codes in the proposed ACS revisions, thereby creating a waterfall effect of ACS coding changes. Therefore, the final ACS revisions now list several new sub-elements under the overarching element, a framework that will not substantially affect ACS codes and that the FAA could apply for future ACS revisions. For example, the Instrument Rating—Airplane ACS dated June 2018, FAA–S–ACS–8B, sets forth the knowledge element of ''Route planning, including consideration of the available navigational facilities, special use airspace, preferred routes, and alternate airports.'' The FAA recognizes that many substantive concepts reside within this overarching element, such that a discrete deficiency should receive a narrower scope (*i.e.,* an applicant could be deficient in demonstrating knowledge of route planning because the applicant missed a question in chart supplements but subsequently receive an endorsement from an instructor by demonstrating knowledge of special use airspace, thereby failing to cure the deficiency). Therefore, the FAA further detailed the element into sub-elements.[89] These sub-elements will also provide applicants, evaluators, and authorized instructors with more discrete identification of subject deficiency.

In the future, if the FAA adds discrete elements to ACS tasks, the FAA has identified a framework of including additions at the end of the listing so as to not create a waterfall effect of code shifting. Additionally, where the FAA removed an element, the FAA simply replaced the text with the term ''Archived.'' A record of archived ACS testing codes appears in Section 8 of the ACS Companion Guide for Pilots, as well as a record of changes in the front matter of the particular ACS. The FAA plans to update and utilize Section 8 of the Companion Guide to communicate archived codes in future revisions of ACS that may occur.

Finally, an applicant must test in accordance with the regulations that exist at the time of the practical test, meaning that the evaluator must base the practical test on the version of the ACS incorporated by reference at the time of that test. Evaluators will test applicants on the elements that the applicant was shown to be deficient on the knowledge test; however, if the codes correspond to any archived elements that no longer apply to the ACS with which the practical test must align, evaluators would not include those elements on the practical test.[90] Therefore, the FAA modified appendix 1 of the ACS series with an applicability statement in the minimum elements tested for each applicable task.

D. Record of Changes

The FAA received a number of editorial or minor changes to specific ACS, PTS, and the ACS Companion Guide for Pilots. Because the FAA concurs and adopts these changes as submitted, the FAA does not find it necessary to respond to each individual comment with substantial rationale. Additionally, during the pendency of the rulemaking, the FAA identified certain modifications necessary to improve the quality of the documents. The FAA presents the following record of changes as implemented in the ACS and PTS incorporated by reference in this final rule and the companion guide.

TABLE 3—RECORD OF EDITORIAL/MINOR CHANGES

Document	Changes
FAA–G–ACS–2, Airman Certification Standards Companion Guide for Pilots.	1. Modified Applicant's Checklist to allow for ''printed or electronic'' Chart Supplement or AIM. 2. Replaced weather AC 00–6, AC 00–45, and AC 00–54 with the Aviation Weather Handbook (FAA–H–8083–28) in Section 5: References. 3. Revised acronym ''KOL'' to ''KOEL''. 4. Added AC 60–22, *Aeronautical Decision Making* to Section 5: References. 5. Removed FAA–H–8083–33 from Section 5: References.
All Airman Certification Standards	1. Added an introductory note in the Foreword referencing and explaining the ACS Companion Guide for Pilots. 2. Added Pilots Handbook of Aeronautical Knowledge (FAA–H–8083–25) and the Risk Management Handbook (FAA–H–8083–2) as a reference in various Tasks. 3. Replaced weather AC 00–6, AC 00–45, and AC 00–54 with the Aviation Weather Handbook (FAA–H–8083–28). 4. Revised weather task sub-element texts to current weather products. 5. Added legend with added ratings table acronym definitions in appendix 1, Practical Test Roles, Responsibilities, and Outcomes, where applicable. 6. Revised acronym ''KOL'' to ''KOEL'', as applicable. 7. Included information related to proficiency checks and English language proficiency in the appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Evaluator Responsibilities section. 8. Edited Use of Flight Simulation Training Devices (FSTD) paragraph in appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations.
All Airplane Airman Certification Standards	1. Standardized use of ASEL, ASES, AMEL, and AMES acronyms. 2. Added Major Enhancements Section for existing Airplane ACS providing a key of added and archived elements.

[88] For example, the ARAC ACS WG provided that an AKTR with code ''CA.I.C.K1.a'' did not correspond to anything because it was removed from the ACS version that was proposed to be incorporated by reference with this rulemaking (*i.e.,* FAA–S–ACS–7B). Additionally, because of the shuffling, upon finalization of this final rule and the revised ACS, a person would be unclear whether the AKTR code ''PA.VI.B.S6'' on their AKTR means ''uses proper communication procedures when utilizing radar services,'' as stated in FAA–S–ACS–6B, or ''maintain the selected altitude, ± 200 feet and heading, ± 15°,'' as stated in FAA–S–ACS–6C.

[89] The sub-elements listed as: K1a through K1h include: available navigational facilities, special use airspace, preferred routes, primary and alternate airports, enroute charts, chart supplements, NOTAMs, and terminal procedures publications (TPP). The sub-elements were also added in the Instrument-Helicopter ACS, Instrument-Powered-Lift ACS, and Flight Instructor-Instrument Powered Lift ACS.

[90] The FAA notes, however, that the requirement for the applicant to demonstrate satisfactory knowledge of the deficient elements pursuant to § 61.39(a)(6) remains in effect. In the case of an archived code, the applicant, and the authorized instructor in providing the endorsement, would use the ACS Companion Guide for Pilots to determine the specific subject area corresponding to that code.

TABLE 3—RECORD OF EDITORIAL/MINOR CHANGES—Continued

Document	Changes
FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards.	1. Corrected Table of Contents to include the Credit for Pilot Time in an ATD section. 2. Added AC 60–22, *Aeronautical Decision Making,* as a reference to AOO I, Preflight Preparation, Task F, Human Factors. 3. Added statement pertaining to certain training and checking programs in appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Satisfactory Performance. 4. Added statement to appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, V. Stall Prevention, ''Other warnings, cautions, or alerts that do not meet the definition of a stall warning, such as a low airspeed warning, cannot be used as an indication of an impending stall for completion of these stall Tasks.''
FAA–S–ACS–25, Flight Instructor for Airplane Category Airman Certification Standards.	1. Corrected out-of-sequence knowledge sub-element of K6 in AOO I, Fundamentals of Instructing, Task D, Student Evaluation, Assessment, and Testing. 2. Removed the AOO II, Technical Subject Areas, Task H, Navigation Systems and Radar Services task skill element requiring an applicant to maintain the appropriate altitude. 3. Added a note specifying the minimum knowledge elements required in AOO II, Technical Subject Areas, Task P, One Engine Inoperative Performance. 4. Relocated information regarding previously developed lesson plans from the objective for AOO IV, Preflight Lesson on a Maneuver to be Performed in Flight, Task A, Maneuver Lesson, into a note. 5. Replaced phrase within AI.VII.E.K2 ''approach and landing performance'' with ''takeoff and climb performance''. 6. Revised phrase within AI.X.D.R5 from ''elevator stall'' to ''elevator trim stall''. 7. Formatting revisions within appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Evaluator Responsibilities.
FAA–S–ACS–7B, Commercial Pilot for Airplane Category Airman Certification Standards.	1. Added 14 CFR 119.1(e) as a reference to the AOO I, Preflight Preparation, Task A, Pilot Qualifications. 2. Replaced phrase within CA.IV.E.K1 ''on approach and landing performance'' with ''on takeoff and climb performance''. 3. Added CA.VI.B.S5 element. 4. Revised phrase within CA.VII.C.R5 from ''elevator stall'' with ''elevator trim stall''. 5. Removed the complex airplane requirement statement from appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, Equipment Requirements & Limitations section.
FAA–S–ACS–6C, Private Pilot for Airplane Category Airman Certification Standards.	1. Replaced phrase within PA.IV.E.K1 ''on approach and landing performance'' with ''on takeoff and climb performance''. 2. Revised phrase within PA.VII.C.R5 from ''elevator stall'' with ''elevator trim stall''. 3. Revised AOO VIII, Basic Instrument Maneuvers, Task E, Recovery from Unusual Flight Attitudes,[91] PA.VIII.E.R7 element text from ''High G situations'' to ''Operating envelope considerations''. 4. Removed the complex airplane requirement statement from appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, Equipment Requirements & Limitations section.
FAA–S–ACS–8C, Instrument Rating—Airplane Airman Certification Standards.	1. Added note to AOO I, Preflight Preparation, Task C, Cross-Country Flight Planning, regarding use of a computer-generated flight plan. 2. Removed instructor designation[92] within appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Instrument Proficiency Check.
All Powered-Lift Airman Certification Standards	1. Replaced ''VTOL'' and ''cruise'' with ''thrust-borne flight,'' ''semi-wing borne flight,'' and ''wing-borne flight,'' as applicable. 2. Replaced the term ''conversion/transition'' with ''conversion,'' as applicable. 3. Replaced ''conversion angle'' with ''thrust vector angle,'' as applicable. 4. Removed FAA–H–8083–33 as a reference.
FAA–S–ACS–27, Flight Instructor for Powered-Lift Category Airman Certification Standards.	1. Removed AOO II, Technical Subject Areas, Task H, Navigation Systems and Radar Services element, IL.II.H.S6, requiring an applicant to maintain the appropriate altitude. 2. Relocated previously developed lesson plan information for AOO IV, Preflight Lesson on a Maneuver to be Performed in Flight from ''objective'' to ''note''. 3. Specified checklists to be completed in element IL.VIII.G.S1 of AOO VIII, Takeoffs, Landings, and Go-Arounds, Task G, Running/Roll-On Landing (*i.e.*, approach and landing checklists). 4. Added note to AOO XII, Slow Flight and Stalls, clarifying minimum Task selection. 5. Added note to AOO XIV, Emergency Operations, and AOO XV, Special Operations, clarifying minimum Task selection. 6. Formatting revisions within appendix 1. Practical Test Roles, Responsibilities, and Outcomes.
FAA–S–ACS–2, Commercial Pilot for Powered-Lift Category Airman Certification Standards.	1. Added 14 CFR 119.1(e) as a reference to AOO I, Preflight Preparation, Task A, Pilot Qualifications. 2. Specified checklists to be completed in CP.V.G.S1 of AOO V, Takeoffs, Landings, and Go-Arounds, Task G, Running/Roll-On Landing (*i.e.*, the approach and landing checklists). 3. Revised ''Addition of a Powered-Lift Rating to an Existing Commercial Pilot Certificate'' table to specify that selection requirements for Tasks are set forth in the body of the ACS (defined by an asterisk) rather than a requirement to test all tasks under that AOO.

TABLE 3—RECORD OF EDITORIAL/MINOR CHANGES—Continued

Document	Changes
FAA–S–ACS–13, Private Pilot for Powered-Lift Category Airman Certification Standards.	1. Added sub-element (e) to AOO I, Preflight Preparation, Task B, Airworthiness Requirements, PL.I.B.K1 (Owner/Operator and pilot-in-command responsibilities). 2. Specified checklists to be completed in PL.V.G.S1 of AOO V, Takeoffs, Landings, and Go-Arounds, Task G, Running/Roll-On Landing (*i.e.,* the approach and landing checklists). 3. Added PL.VIII.B.S5 to AOO VIII, Navigation, Task B, Navigation and Radar Services (Recognize signal loss or interference and take appropriate action, if applicable). 4. Revised ''Addition of a Powered-Lift Rating to an Existing Private Pilot Certificate'' table to specify that selection requirements for Tasks are set forth in the body of the ACS (defined by an asterisk) rather than a requirement to test all tasks under that AOO.
FAA–S–ACS–28, Flight Instructor—Instrument Rating Powered-Lift Airman Certification Standards.	1. Corrected prefix of ACS Codes for AOO II, Technical Subject Areas, Task E, Regulations and Publications Related to Instrument Flight Operations. 2. Added note to AOO III, Preflight Preparation, Task B, Cross-Country Flight Planning regarding use of a computer-generated flight plan. 3. Relocated information regarding previously developed lesson plans from the objective for AOO IV, Preflight Lesson on a Maneuver to be Performed in Flight, Task A, Maneuver Lesson, into a note. 4. Formatting revisions within appendix 1. Practical Test Roles, Responsibilities, and Outcomes. 5. Added instructions to appendix 2 for the evaluator in the case of Task failure due to ADM considerations.
FAA–S–ACS–3, Instrument Rating—Powered-Lift Airman Certification Standards.	1. Added note to AOO I, Preflight Preparation, Task C, Cross-Country Flight Planning, regarding use of a computer-generated flight plan. 2. Removed instructor designation within appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Instrument Proficiency Check.
FAA–S–ACS–29, Flight Instructor for Rotorcraft Category Helicopter Rating Airman Certification Standards.	1. Added the Helicopter Instructor's Handbook (FAA–H–8083–4) as a reference to various tasks. 2. Corrected AOO II, Technical Subject Areas, Task I, Navigation Systems and Radar Services, by removing proposed HI.II.I.R5 element requiring the use of autopilot to make appropriate course intercepts (if installed and at the evaluator's discretion) and adding a new task element requiring use of an EFB (if used). 3. Removed the AOO II, Technical Subject Areas, Task I, Navigation Systems and Radar Services task skill element HI.II.I.S5 requiring an applicant Recognize loss of navigational signal and take appropriate action. 4. Removed the AOO II, Technical Subject Areas, Task I, Navigation Systems and Radar Services task element HI.II.I.S7 requiring an applicant to maintain the appropriate altitude. 5. Relocated information regarding previously developed lesson plans from the objective for AOO IV, Preflight Lesson on a Maneuver to be Performed in Flight, Task A, Maneuver Lesson, into a note. 6. Changed AOO V, Preflight Procedures, Task D, Before Takeoff Check, HI.V.D.R1 element from ''NTSB accident reporting'' to ''Division of Attention while conducting before takeoff checks''. 7. Added risk element HI.V.D.R3, ''Hazardous effects of downwash'' to AOO V, Preflight Procedures, Task D, Before Takeoff Check. 8. Added notes to AOO VI (Airport and Heliport Operations), AOO VII (Hovering Maneuvers), AOO VIII (Takeoffs, Landings, and Go-Arounds), and AOO X (Performance Maneuvers) clarifying minimum Task selection. 9. Revised title of AOO VIII, Takeoffs, Landings, and Go-Arounds, Task B, from ''Normal Approach and Landing'' to ''Normal and Crosswind Approach''. 10. Revised element HI.X.B.S9 in AOO X, Performance Maneuvers, Task B, Straight-in-Autorotation in a Single-Engine Helicopter for clarity. 11. Reworded objective of AOO X, Performance Maneuvers, Task C, Autorotation With Turns in a Single-Engine Helicopter, to remove redundancy. 12. Aligned AOO XI, Emergency Operations, Task E, Recovery from Unusual Flight Attitudes, HI.XI.E.S1 [93] to the Instrument Helicopter ACS. 13. Provided additional guidance to evaluators regarding operations at the start or completion of a maneuver within appendix 1, in the Evaluator Responsibilities section. 14. Formatting revisions within appendix 1. Practical Test Roles, Responsibilities, and Outcomes. 15. Clarified the requirement in appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, in the Single and Multiengine Helicopters section that an applicant must provide a single-engine helicopter capable of demonstrating touchdown autorotations. 16. Added information to appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, to indicate that the briefing in reference to AOO XI, Emergency Operations, Task E, Recovery from Unusual Flight Attitudes, must address any hazards associated with the rotor system.
FAA–S–ACS–16, Commercial Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards.	1. Added 14 CFR 119.1(e) as a reference to AOO I, Preflight Preparation, Task A, Pilot Qualifications. 2. Added FAA–H–8083–21 to AOO I, Preflight Preparation, Task C, Weather Information. 3. Revised title of AOO V, Takeoffs, Landings, and Go-Arounds, Task B, from ''Normal Approach and Landing'' to ''Normal and Crosswind Approach''. 4. Revised CH.VI.B.S9 in AOO VI, Performance Maneuvers, Task B, Straight-in-Autorotation in a Single-Engine Helicopter for clarity.

TABLE 3—RECORD OF EDITORIAL/MINOR CHANGES—Continued

Document	Changes
	5. Added risk element CH.VIII.B.R7, ''Powerplant failure during the maneuver'', to AOO VIII, Emergency Operations, Task B, Powerplant Failure at Altitude in a Single-Engine Helicopter. 6. Aligned AOO VIII, Emergency Operations, Task M, Recovery from Unusual Flight Attitudes, CH.VIII.M.S1 [94] to the Instrument Helicopter ACS. 7. Provided additional guidance to evaluators regarding operations at the start or completion of a maneuver within appendix 1 in the Evaluator Responsibilities section. 8. Added a note to the added ratings table explaining asterisks in the appendix 1, Practical Test Practical Test Roles, Responsibilities, and Outcomes. 9. Added information to appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, in reference to AOO VIII, Emergency Operations, Task M, Recovery from Unusual Flight Attitudes that the briefing must address any hazards associated with the rotor system.
FAA–S–ACS–15, Private Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards.	1. Added FAA–H–8083–21 to AOO I, Preflight Preparation, Task C, Weather Information. 2. Designated task selection for AOO IV, Hovering Maneuvers, and AOO V, Takeoffs, Landings, and Go-Arounds when an applicant provides a helicopter with wheel-type landing gear. 3. Revised title of AOO V, Takeoffs, Landings, and Go-Arounds, Task B, from ''Normal Approach and Landing'' to ''Normal and Crosswind Approach''. 4. Revised element PH.VI.B.S9 in AOO VI, Performance Maneuvers, Task B, Straight-in-Autorotation in a Single-Engine Helicopter for clarity. 5. Added risk element PH.VIII.B.R7, ''Powerplant failure during the maneuver,'' to AOO VIII, Emergency Operations, Task B, Powerplant Failure at Altitude in a Single-Engine Helicopter. 6. Provided additional guidance to evaluators regarding operations at the start or completion of a maneuver within appendix 1 in the Evaluator Responsibilities section. 7. Revised ''Addition of a Rotorcraft Category Helicopter Rating to an Existing Private Pilot Certificate'' table to specify that selection requirements for Tasks are set forth in the body of the ACS (defined by an asterisk) rather than a requirement to test all tasks under that AOO.
FAA–S–ACS–14, Instrument Rating—Helicopter Airman Certification Standards.	1. Added note to AOO I, Preflight Preparation, Task C, Cross-Country Flight Planning, regarding use of a computer-generated flight plan. 2. Added note below ''Addition of a Helicopter Rating to an Existing Instrument Rating Certificate'' table in appendix 1 indicating that AOO VII, Emergency Operations, Task B, Instrument Approach and Landing with an Inoperative Engine (Simulated) (Multiengine Helicopter Only), applies only if the applicant supplies a multiengine helicopter. 3. Removed instructor designation within appendix 1, Practical Test Roles, Responsibilities, and Outcomes, Instrument Proficiency Check. 4. Added to appendix 3, Aircraft, Equipment, and Operational Requirements & Limitations, in reference to AOO IV, Flight by Reference to Instruments, Task B, Recovery from Unusual Flight Attitudes that the briefing must address any hazards associated with the rotor system.
All PTS	1. Replaced Area Forecast (FA) with Graphical Forecasts for Aviation (GFA), as applicable. 2. Replaced weather AC 00–6, AC 00–45, and AC 00–54 with the Aviation Weather Handbook (FAA–H–8083–28). 3. Replaced A/FD with Chart Supplements.
FAA–S–8081–8C, Flight Instructor Practical Test Standards for Glider Category.	1. Replaced the Soaring Flight Manual with the Glider Flying Handbook (FAA–H–8083–13). 2. Revised AOO II, Technical Subject Areas, Task A, Aeromedical Factors, element 10 to, ''Stress and Fatigue causes, effects, and corrective actions''. 3. Added AOO II, Technical Subject Areas, Task A, Aeromedical Factors, element 11, ''Visual Illusions''.
FAA–S–8081–23B, Commercial Pilot Practical Test Standards for Glider Category.	1. Added AOO I, Preflight Preparation, Task C, Weather Information, element 1.c, ''Contents of a standard briefing and soaring forecast''. 2. Added AOO I, Preflight Preparation, Task F, Aeromedical Factors, element 1.i, ''Visual Illusions.'' 3. Revised AOO III, Airport and Gliderport Operations, Task C, Airport, Runway, and Taxiway, Signs, Marking, and Lighting, element 1, to align with task description.
FAA–S–8081–22A, Private Pilot Practical Test Standards for Glider Category.	1. Replaced the Soaring Flight Manual with The Glider Flying Handbook (FAA–H–8083–13). 2. Added AOO I, Preflight Preparation, Task B, Weather Information, element 1.c, ''Contents of a standard briefing and soaring forecast''. 3. Added AOO I, Preflight Preparation, Task E, Aeromedical Factors, element 1.i, ''Visual Illusions.'' 4. Revised AOO III, Airport and Gliderport Operations, Task C, Airport, Runway, and Taxiway Signs, Markings, and Lighting, element 1, to align with task description.
FAA–S–8081–17A, Private Pilot Practical Test Standards for Lighter-Than-Air Category.	1. Changed AOO I, Preflight Preparation, Task A, Certificates and Documents, element 1.b, from ''medical statement'' to ''medical fitness''. 2. Restored checklist usage element in AOO IV, Launches and Landings, Task B, Launch Over Obstacle; AOO VI, Navigation, Task A, Navigation; and AOO VII, Emergency Equipment, Task B, Emergency Equipment and Survival Gear.
FAA–S–8081–32A, Private Pilot Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Aircraft Category.	1. Corrected inconsistent Weight-Shift-Control hyphenation.
FAA–S–8081–31A, Sport Pilot and Sport Pilot Flight Instructor Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Category.	1. Corrected inconsistent Weight-Shift-Control hyphenation.

TABLE 3—RECORD OF EDITORIAL/MINOR CHANGES—Continued

Document	Changes
FAA–S–8081–9E, Flight Instructor Instrument Practical Test Standards for Airplane Rating and Helicopter Rating.	1. Replaced TIBS and TWEB with sources of weather data in AOO III, Preflight Preparation, Task A, Weather Information, element 1.b and removed from abbreviations/acronyms list. 2. Corrected ''Pilot heat'' to read ''Pitot heat''. 3. Removed Stability Chart from element 2.h in AOO III, Preflight Preparation, Task A, Weather Information.
FAA–S–8081–10E, Aircraft Dispatcher Practical Test Standards.	1. Removed EWINS from AOO I, Flight Planning/Dispatch Release, Task C, Weather Observation, Analysis, and Forecasts. 2. Removed footnote 4 regarding AELS in AOO I, Flight Planning/Dispatch Release, Task E, Aircraft Systems, Performance, and Limitations. 3. Removed approaches list from element 5 in AOO IV, Arrival, Approach, and Landing Procedures, Task A, ATC and Air Navigation Procedures. 4. Removed ETOPS, EWINS, PAR, and PRM from Acronyms/Abbreviations list.

E. Out of Scope

The FAA received multiple comments that were considered out of scope. This section summarizes such comments and provides a brief response.

One commenter stated that part 141 pilot schools and part 142 training centers should be required to report disapprovals or unsatisfactory results on final progress checks to the pilot records database, so all pilots are treated equally. The FAA notes that the pilot records database facilitates the sharing of pilot records among those air carriers, operators, and entities set forth by 14 CFR 111.1. The applicability provisions of the part 111 pilot records database do not include either part 141 pilot schools or part 142 air agencies, nor did the FAA contemplate adding disapprovals for unsatisfactory checks to part 111 in the NPRM.[95]

One commenter expressed concern about the testing standards in part 65 for airmen other than flight crewmembers. Specifically, the commenter stated that, while the written exam (knowledge test) and oral exam for mechanics are graded to a minimum 70% passing score, the practical test for mechanics should be passed to a 100% score. The FAA notes that passing rate for all part 65 tests is set forth in § 65.17(b) and applies to those tests for applicants of an air traffic control, aircraft dispatcher, mechanic, repairman, and parachute rigger certificate. This rulemaking did not propose any changes to the passing rates for any airmen testing and, therefore, considers any changes to the required score outside of the scope of this final rule. The FAA may consider rulemaking on this topic at a future date.

One commenter asked if the definition of autorotation in 14 CFR part 1 required a change to include powered-lift aircraft, as it currently only applies to rotorcraft. First, the FAA notes that the powered-lift ACS do not use the term ''autorotation.'' Further, the FAA did not propose any changes to definitions within 14 CFR 1.1 and, therefore, considers changing the definition of autorotation out of the scope of this rulemaking. As previously discussed in this preamble, the powered-lift rulemaking project is the more appropriate vehicle to contemplate discrete issues in the certification of powered-lift and airmen that will operate such aircraft, including the applicability of autorotation as a term. The FAA will reconcile the powered-lift final rule with this final rule, as applicable.

The ARAC ACS WG commented that the ground instructor certificate should have its own ACS incorporated by reference. Subpart I of part 61 governs the requirements for the issuance and conditions and limitations of ground instructor certificates and ratings. Among other eligibility requirements, a ground instructor is required to take only a knowledge test;[96] there is no practical test associated with a ground instructor certificate or rating. Therefore, the FAA did not draft a ground instructor PTS or ACS. Additionally, as the regulated community would not have had an opportunity to inspect the draft, it would obviate notice and comment procedures under the APA. Therefore, at this time, a ground instructor standard is out of scope of this rulemaking but may be considered at a future date.

One commenter made several suggestions to address vertical flight infrastructure standards such as heliports, helistops, helidecks, Emergency Helicopter Landing Facilities (EHLF), Predesignated Emergency Landing Areas (PELA), vertiports, vertistops and droneports. The commenter expressed that these vertical flight infrastructure elements are safety sensitive, and yet there are little to no test questions about this subject area, resulting in little training. The commenter asserted that education materials must contain information about this subject area before test questions and, thus, requested the FAA to include vertical flight infrastructure subject matter into certain handbooks, and, eventually, the powered-lift and helicopter ACS. The FAA notes that it can revise information in handbooks outside of rulemaking, as the APA does not apply to these guidance documents, and the FAA may do so to account for future ACS updates. Additionally, the majority of the helicopter and powered-lift ACS include the area of operation ''Airport and Heliport Operations,'' which should encompass testing (and training) regarding these assets that comprise vertical infrastructure.

V. Regulatory Notices and Analyses

Federal agencies consider impacts of regulatory actions under a variety of executive orders and other

[91] See section IV.C. of this preamble for additional information on changes to the elements within this task due to coding.

[92] Because the FAA designates instructors giving an IPC as evaluators, the term ''evaluator'' would inherently include instructors.

[93] As discussed in section VI.B.2.iii of this preamble, the adopted Flight Instructor for Rotorcraft Category Helicopter Rating ACS adds the task Flight Solely by Reference to Instruments as AOO X, Task D. As a result, the lettering in the subsequent tasks shifted by one letter. Therefore, this element appeared in the proposed ACS as HI.XI.D.S1 under the Recovery from Unusual Flight Attitudes Task D, now Task E.

[94] As discussed in section VI.B.2.iii of this preamble, the adopted Commercial Pilot for Rotorcraft Category Helicopter Rating ACS adds the task Flight Solely by Reference to Instruments as AOO VIII, Task L. As a result, the lettering in the subsequent tasks shifted by one letter. Therefore, this element appeared in the proposed ACS as CH.VIII.L.S1 under the Recovery from Unusual Flight Attitudes Task L, now Task M.

[95] In 2010, Congress directed the Administrator to establish the pilot records database. 49 U.S.C. 44703(i). The plain language of the statute only permits the FAA to require employers of pilots to report records. Part 142 training centers and part 141 pilot schools do not qualify as the employers of the pilots who receive training and checking. See *Pilot Records Database,* 86 FR 31016 (Jun. 10, 2021).

[96] 14 CFR 61.213.

requirements. First, Executive Order 12866 and Executive Order 13563, as amended by Executive Order 14094 (''Modernizing Regulatory Review''), direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify the costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year. The current threshold after adjustment for inflation is $177,000,000, using the most current (2022) Implicit Price Deflator for the Gross Domestic Product. This portion of the preamble summarizes the FAA's analysis of the economic impacts of this rule.

In conducting these analyses, the FAA determined that this rule: will result in benefits that justify costs; is not a ''significant regulatory action'' as defined in section 3(f) of Executive Order 12866 as amended by Executive Order 14094; will not have a significant economic impact on a substantial number of small entities; will not create unnecessary obstacles to the foreign commerce of the United States; and will not impose an unfunded mandate on State, local, or Tribal governments, or on the private sector.

A. Regulatory Evaluation

On December 12, 2022, the FAA published a Notice of Proposed Rulemaking (NPRM) and received comments from 39 individuals and organizations on the proposed rule. However, none of these comments expressed concerned with economic impacts of the proposal. Therefore, this regulatory evaluation has no new changes over the regulatory analyses provided in the NPRM.

Through this rulemaking, the FAA incorporated certain PTS and ACS by reference into parts 61, 63, and 65 so the standards carry the full force and effect of regulation. Because of the unique nature of the PTS and ACS documents, which are lengthy and contain complex and technical tables, the FAA used the mechanism of IBR. IBR allows Federal agencies to comply with the requirements of the APA to publish rules in the **Federal Register** and the Code of Federal Regulations by referring to material published elsewhere. Material that is incorporated by reference has the same legal status as if it were published in full in the **Federal Register** and the Code of Federal Regulations.

1. Baseline for the Analysis

Title 14 CFR parts 61, 63, and 65 prescribe the requirements for airmen to obtain a certificate and/or rating. Each part contains the general requirements for eligibility, aeronautical knowledge, flight proficiency, and aeronautical experience requirements, as applicable, for each certificate and/or rating sought. This generally includes the requirement to pass a practical test specific to the certificate and/or rating sought.

The PTS and the ACS impose requirements on all persons seeking an airman certificate and/or rating. The PTS and ACS require an applicant seeking a certificate and/or rating to complete specific tasks and maneuvers to a minimum given standard in order to obtain the applicable certificate and/or rating. As such, if an applicant does not perform a task to the prescribed standard, found in the applicable ACS or PTS, the applicant cannot obtain the applicable certificate and/or rating. Unsatisfactory performance results in a notice of disapproval and/or denial of the certificate and/or rating. The PTS and the ACS, which are finalized by this rule to be incorporated by reference, are the testing standards that are already in use or the process by which the practical test is conducted.

2. Benefits

The mechanism of IBR allows Federal Agencies to comply with the requirement to publish rules in the **Federal Register** and the CFR by referring to material already published elsewhere.[97] IBR functions to substantially reduce the size of 14 CFR parts 61, 63, and 65, which would otherwise require the PTS and ACS to be replicated in their entirety into the regulations, resulting in hundreds of additional pages including complex and technical tables that would be unsuitable for the CFR. The FAA will continue to draw on the expertise and resources of the aviation industry to develop and update the testing standards and strengthen private-public collaboration and transparency. IBR will maintain public and private industry collaboration. Additionally, while the practical tests are currently conducted in accordance with the PTS and ACS, applicants for a certificate and/or rating, and pilots completing proficiency checks, will be better informed about the exact tasks and objectives required to successfully complete each area of operation because evaluators will be required to test on the exact tasks contained in the applicable PTS and/or ACS. Further, instructors are encouraged to utilize the applicable ACS and/or PTS during training to ensure applicants are equipped with the knowledge and proficiency to successfully complete a practical test or proficiency check. Applicants and instructors are, therefore, benefitted by transparency and specificity in test preparation.

3. Costs

The FAA has evaluated the cost impacts to the stakeholders involved in this final rule, which includes airmen and the FAA. As discussed in the NPRM preamble, the FAA noted the addition of tasks within four ACS (Commercial Pilot for Airplane Category ACS, Private Pilot for Rotorcraft Category Helicopter Rating ACS, Commercial Pilot for Rotorcraft Category Helicopter Rating ACS, and Flight Instructor for Rotorcraft Category Helicopter Rating ACS).[98] Additionally, since the NPRM, the FAA notes the addition of the task Flight Solely by Reference to Instruments within two ACS (Flight Instructor for Rotorcraft Category Helicopter Rating ACS and Commercial Pilot for Rotorcraft Category Helicopter Rating ACS) from an outgrowth of ARAC ACS WG comments.[99] The FAA determined these additions would add negligible amount of time to the completion of ACS, but will have no quantifiable cost impact. These added tasks may be completed concurrently with tasks already required on the transitioned

[97] IBR Handbook, Office of the Federal Register (June, 2023).

[98] Specifically, the NPRM highlighted tasks in the proposed ACS: (1) the Forward Slip to the Landing task requirement (see note following Addition of an Airplane Single-Engine Land Rating to an Existing Commercial Pilot Certificate) in the Commercial Pilot for Airplane Category ACS; (2) the Approach and Landing with One Engine Inoperative task (AOO VII, Task C) in the Private Pilot for Rotorcraft Category Helicopter Rating ACS; (3) the Anti-Torque System Failure (Oral Only) task (AOO VIII, Task G), the Recovery from Unusual Flight Attitudes task (AOO VIII, Task M), and the Night Operations task (AOO I, Task I) in the Commercial Pilot for Rotorcraft Category Helicopter Rating ACS; and (4) the Recovery from Unusual Flight Attitudes task (AOO XI, Task E) in the Flight Instructor for Rotorcraft Category Helicopter Rating ACS. *See* 87 FR 75962.

[99] See section IV.B.2.iii of this preamble for additional discussion on this task.

ACS and add a few minutes to the requisite practical test. In sum, the FAA anticipates this final rule will result in no additional cost impacts to airmen and the FAA.

i. Applicants and Airmen

The FAA does not anticipate new costs to applicants for an initial certificate and/or rating and existing airmen (*e.g.,* pilots completing proficiency checks, pilots seeking additional certificates and/or ratings) because there are no substantive changes to the testing processes, areas of operation, or elements upon which airmen are currently tested in order to obtain a certificate, as the practical tests are already conducted in accordance with the applicable ACS/PTS. Rather, this rule incorporates the documents by reference into the regulations to ensure compliance with the APA and provide the public with requisite notice and an opportunity to comment. Therefore, applicants seeking a certificate and/or rating and currently certificated pilots performing proficiency checks will not incur additional costs.

ii. The FAA

The FAA does not anticipate new costs to the agency because the FAA is not changing the process by which testing is conducted or the manner in which PTS and ACS are currently implemented.

4. Regulatory Alternatives

The FAA did not consider regulatory alternatives for this final rule as there are no legally supportable alternatives to mandating the requirements for airman certification and ensuring consistent standards for airman certificates and ratings.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980, Public Law 96–354, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121) and the Small Business Jobs Act of 2010 (Pub. L. 111–240), require Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term ''small entities'' comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The FAA has not identified any small entities that would be affected by the final rule because this rule does not affect the content of the practical test or how the practical test is currently conducted. While there are many small entities that employ persons who conduct practical tests on behalf of the Administrator and administer proficiency checks for airmen, there are no changes to these existing procedures and exams, in practice (*i.e.,* evaluators already utilize the applicable ACS and/or PTS). Therefore, for the reasons provided, the FAA certifies that the rule will not have a significant economic impact on a substantial number of small entities.

C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effects of this rule and finds it does not create an unnecessary obstacle to foreign commerce.

D. Unfunded Mandates Assessment

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) governs the issuance of Federal regulations that require unfunded mandates. An unfunded mandate is a regulation that requires a State, local, or Tribal government or the private sector to incur direct costs without the Federal government having first provided the funds to pay those costs. The FAA determined that this final rule will not result in the expenditure of $177 million or more by State, local, or Tribal governments, in the aggregate, or the private sector, in any one year.

E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. The FAA has determined that there is no new requirement for information collection associated with this final rule.

F. International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are no ICAO Standards and Recommended Practices that correspond to these regulations.

G. Environmental Analysis

FAA Order 1050.1F identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA) in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 5–6.6f for regulations and involves no extraordinary circumstances.

VI. Executive Order Determinations

A. Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of Executive Order 13132, Federalism. The FAA has determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, will not have federalism implications.

B. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Consistent with Executive Order 13175, Consultation and Coordination with Indian Tribal Governments,[100] and FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures,[101] the FAA ensures that Federally Recognized Tribes (Tribes) are given the opportunity to provide meaningful and timely input regarding proposed Federal actions that have the potential to have substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal

[100] 65 FR 67249 (Nov. 6, 2000).

[101] FAA Order No. 1210.20 (Jan. 28, 2004), available at *https://www.faa.gov/documentLibrary/media/1210.pdf.*

government and Indian tribes; or to affect uniquely or significantly their respective Tribes. At this point, the FAA has not identified any unique or significant effects, environmental or otherwise, on Tribes resulting from this final rule.

C. Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this final rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use. The FAA has determined that it is not a ''significant energy action'' under the executive order and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

D. Executive Order 13609, Promoting International Regulatory Cooperation

Executive Order 13609, Promoting International Regulatory Cooperation, promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policies and agency responsibilities of Executive Order 13609, and has determined that this action will have no effect on international regulatory cooperation.

VII. Additional Information

A. Electronic Access and Filing

A copy of the NPRM, all comments received, this final rule, and all background material may be viewed online at *https://www.regulations.gov* using the docket number listed above. A copy of this final rule was placed in the docket. Electronic retrieval help and guidelines are available on the website. It is available 24 hours each day, 365 days each year. An electronic copy of this document may also be downloaded from the Office of the Federal Register's website at *https://www.federalregister.gov* and the Government Publishing Office's website at *https://www.govinfo.gov.* A copy may also be found at the FAA's Regulations and Policies website at *https://www.faa.gov/regulations_policies.*

Copies may also be obtained by sending a request to the Federal Aviation Administration, Office of Rulemaking, 800 Independence Avenue SW, Washington, DC 20591, or by calling (202) 267–9677. Commenters must identify the docket or notice number of this rulemaking.

All documents the FAA considered in developing this final rule, including economic analyses and technical reports, may be accessed in the electronic docket for this rulemaking.

B. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires the FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document may contact its local FAA official, or the person listed under the **FOR FURTHER INFORMATION CONTACT** heading at the beginning of the preamble. To find out more about SBREFA on the internet, visit *https://www.faa.gov/regulations_policies/rulemaking/sbre_act/.*

List of Subjects

14 CFR Part 61

Aircraft, Airmen, Aviation safety, Incorporation by reference, Recreation and recreation areas, Reporting and recordkeeping requirements, Teachers.

14 CFR Part 63

Aircraft, Airmen, Aviation safety, Incorporation by reference, Navigation (air), Reporting and recordkeeping requirements.

14 CFR Part 65

Air traffic controllers, Aircraft, Airmen, Airports, Aviation safety, Incorporation by reference, Reporting and recordkeeping requirements.

The Amendment

In consideration of the foregoing, the Federal Aviation Administration amends chapter I of title 14, Code of Federal Regulations as follows:

PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS

■ 1. The authority citation for part 61 is revised to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701–44703, 44707, 44709–44711, 44729, 44903, 45102–45103, 45301–45302; Sec. 2307 Pub. L. 114–190, 130 Stat. 615 (49 U.S.C. 44703 note); and sec. 318, Pub. L. 115–254, 132 Stat. 3186 (49 U.S.C. 44703 note).

■ 2. Add § 61.14 to read as follows:

§ 61.14 Incorporation by Reference.

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at the Federal Aviation Administration (FAA) and at the National Archives and Records Administration (NARA). Contact FAA, Training and Certification Group, 202–267–1100, *ACSPTSinquiries@faa.gov.* For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov.* The material may be obtained from the Federal Aviation Administration, 800 Independence Avenue SW, Washington DC 20591, 866–835–5322, *www.faa.gov/training_testing.*

(a) *Practical Test Standards.* (1) FAA–S–8081–3B, Recreational Pilot Practical Test Standards for Airplane Category and Rotorcraft Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(2) FAA–S–8081–7C, Flight Instructor Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023; IBR approved for § 61.43 and appendix A to this part.

(3) FAA–S–8081–8C, Flight Instructor Practical Test Standards for Glider Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(4) FAA–S–8081–9E, Flight Instructor Instrument Practical Test Standards for Airplane Rating and Helicopter Rating, November 2023; IBR approved for § 61.43 and appendix A to this part.

(5) FAA–S–8081–15B, Private Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023; IBR approved for § 61.43 and appendix A to this part.

(6) FAA–S–8081–16C, Commercial Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023; IBR approved for § 61.43 and appendix A to this part.

(7) FAA–S–8081–17A, Private Pilot Practical Test Standards for Lighter-Than-Air Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(8) FAA–S–8081–18A, Commercial Pilot Practical Test Standards for Lighter-Than-Air Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(9) FAA–S–8081–20A, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Rotorcraft Category Helicopter Rating, November 2023; IBR approved for §§ 61.43 and 61.58, and appendix A to this part.

(10) FAA–S–8081–22A, Private Pilot Practical Test Standards for Glider Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(11) FAA–S–8081–23B, Commercial Pilot Practical Test Standards for Glider Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(12) FAA–S–8081–29A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Airplane Category, Rotorcraft Category, and Glider Category, November 2023; IBR approved for §§ 61.43, 61.321, and 61.419, and appendix A to this part.

(13) FAA–S–8081–30A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Lighter-Than-Air Category, November 2023; IBR approved for §§ 61.43, 61.321, and 61.419, and appendix A to this part.

(14) FAA–S–8081–31A, Sport Pilot and Sport Pilot Flight Instructor Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Aircraft Category, November 2023; IBR approved for §§ 61.43, 61.321, and 61.419, and appendix A to this part.

(15) FAA–S–8081–32A Private Pilot Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Aircraft Category, November 2023; IBR approved for § 61.43 and appendix A to this part.

(b) *Airman Certification Standards.* (1) FAA–S–ACS–2, Commercial Pilot for Powered-Lift Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(2) FAA–S–ACS–3, Instrument Rating—Powered-Lift Airman Certification Standards, November 2023; IBR approved for §§ 61.43 and 61.57, and appendix A to this part.

(3) FAA–S–ACS–6C, Private Pilot for Airplane Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(4) FAA–S–ACS–7B, Commercial Pilot for Airplane Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(5) FAA–S–ACS–8C, Instrument Rating—Airplane Airman Certification Standards, November 2023; IBR approved for §§ 61.43 and 61.57, and appendix A to this part.

(6) FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards, November 2023; IBR approved for §§ 61.43 and 61.58, and appendix A to this part.

(7) FAA–S–ACS–13, Private Pilot for Powered-Lift Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(8) FAA–S–ACS–14, Instrument Rating—Helicopter Airman Certification Standards, November 2023; IBR approved for §§ 61.43 and 61.57, and appendix A to this part.

(9) FAA–S–ACS–15, Private Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(10) FAA–S–ACS–16, Commercial Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(11) FAA–S–ACS–17, Airline Transport Pilot and Type Rating for Powered-Lift Category Airman Certification Standards, November 2023; IBR approved for §§ 61.43 and 61.58, and appendix A to this part.

(12) FAA–S–ACS–25, Flight Instructor for Airplane Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(13) FAA–S–ACS–27, Flight Instructor for Powered-Lift Category Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(14) FAA–S–ACS–28, Flight Instructor—Instrument Rating Powered-Lift Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

(15) FAA–S–ACS–29, Flight Instructor for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023; IBR approved for § 61.43 and appendix A to this part.

■ 3. Amend § 61.43 by revising paragraphs (a)(1) through (3) to read as follows:

§ 61.43 Practical tests: General procedures.

(a) * * *

(1) Performing the tasks specified in the areas of operation contained in the applicable Airman Certification Standards or Practical Test Standards (incorporated by reference, see § 61.14) as listed in appendix A of this part for the airman certificate or rating sought;

(2) Demonstrating mastery of the aircraft by performing each task required by paragraph (a)(1) of this section successfully;

(3) Demonstrating proficiency and competency of the tasks required by paragraph (a)(1) of this section within the approved standards; and

* * * * *

■ 4. Amend § 61.57 by revising paragraph (d)(1) introductory text to read as follows:

§ 61.57 Recent Flight Experience: Pilot in Command.

* * * * *

(d) * * *

(1) Except as provided in paragraph (e) of this section, a person who has failed to meet the instrument experience requirements of paragraph (c) of this section for more than six calendar months may reestablish instrument currency only by completing an instrument proficiency check. The instrument proficiency check must include the areas of operation contained in the applicable Airman Certification Standards (incorporated by reference, see § 61.14) as listed in appendix A of this part as appropriate to the rating held.

* * * * *

■ 5. Amend § 61.58 by revising paragraph (d)(1) to read as follows:

§ 61.58 Pilot in command proficiency check: Operation of an aircraft that requires more than one pilot flight crewmember or is turbojet-powered.

* * * * *

(d) * * *

(1) A pilot-in-command proficiency check conducted by a person authorized by the Administrator, consisting of the areas of operation contained in the applicable Airman Certification Standards or Practical Test Standards (incorporated by reference, see § 61.14); as listed in appendix A of this part appropriate to the rating held, in an aircraft that is type certificated for more than one pilot flight crewmember or is turbojet powered;

* * * * *

■ 6. Amend § 61.157 by revising paragraphs (e) introductory text, and (e)(1) through (3) to read as follows:

§ 61.157 Flight proficiency.

* * * * *

(e) *Areas of Operation.* A practical test will include normal and abnormal procedures, as applicable, within the areas of operation for practical tests for an airplane category and powered-lift category rating.

(1) For an airplane category—single engine class rating:

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Takeoffs and Landings;

(iv) In-flight maneuvers;

(v) Stall Prevention;

(vi) Instrument procedures;

(vii) Emergency operations; and

(viii) Postflight procedures.

(2) For an airplane category—multiengine class rating:

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Takeoffs and Landings;

(iv) In-flight maneuvers;
(v) Stall Prevention.
(vi) Instrument procedures;
(vii) Emergency operations; and
(viii) Postflight procedures.
(3) For a powered-lift category rating:
(i) Preflight preparation;
(ii) Preflight procedures;
(iii) Takeoffs and Departure phase;
(iv) In-flight maneuvers;
(v) Instrument procedures;
(vi) Landings and approaches to landings;
(vii) Emergency operations; and
(viii) Postflight procedures.

* * * * *

■ 7. Amend § 61.321 by revising paragraph (b) to read as follows:

§ 61.321 How do I obtain privileges to operate an additional category or class of light-sport aircraft?

* * * * *

(b) Successfully complete a proficiency check from an authorized instructor, other than the instructor who trained you, consisting of the tasks in the appropriate areas of operation contained in the applicable Practical Test Standards (incorporated by reference, see § 61.14) as listed in appendix A of this part for the additional light-sport aircraft privilege you seek;

* * * * *

■ 8. Amend § 61.419 by revising paragraph (b) to read as follows:

§ 61.419 How do I obtain privileges to provide training in an additional category or class of light-sport aircraft?

* * * * *

(b) Successfully complete a proficiency check from an authorized instructor, other than the instructor who trained you, consisting of the tasks in the appropriate areas of operation contained in the applicable Practical Test Standards (incorporated by reference, see § 61.14) as listed in appendix A of this part for the additional category and class flight instructor privilege you seek;

* * * * *

■ 9. Add appendix A to part 61 to read as follows:

Appendix A to Part 61—Airman Certification Standards and Practical Test Standards

If you are seeking this certificate, rating, and/or privilege . . .	Then this ACS/PTS (incorporated by reference, see § 61.14) is applicable:
Airline Transport Pilot Certificate; Airplane Category—Single-Engine Land Rating, Airplane Category—Single-Engine Sea Rating, Airplane Category—Multiengine Land Rating, Airplane Category—Multiengine Sea Rating.	FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards, November 2023.
Airline Transport Pilot Certificate; Rotorcraft Category—Helicopter Rating.	FAA–S–8081–20A, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Rotorcraft Category Helicopter Rating, November 2023.
Airline Transport Pilot Certificate; Powered-Lift Category	FAA–S–ACS–17, Airline Transport Pilot and Type Rating for Powered-Lift Category Airman Certification Standards, November 2023.
Commercial Pilot Certificate; Airplane Category—Single-Engine Land Rating, Airplane Category—Single-Engine Sea Rating, Airplane Category—Multiengine Land Rating, Airplane Category—Multiengine Sea Rating.	FAA–S–ACS–7B, Commercial Pilot for Airplane Category Airman Certification Standards, November 2023.
Commercial Pilot Certificate; Rotorcraft Category—Helicopter Rating	FAA–S–ACS–16, Commercial Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023.
Commercial Pilot Certificate; Rotorcraft Category—Gyroplane Rating	FAA–S–8081–16C, Commercial Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023.
Commercial Pilot Certificate; Powered-Lift Category	FAA–S–ACS–2, Commercial Pilot for Powered-Lift Category Airman Certification Standards, November 2023.
Commercial Pilot Certificate; Glider Category	FAA–S–8081–23B, Commercial Pilot Practical Test Standards for Glider Category, November 2023.
Commercial Pilot Certificate; Lighter-Than-Air Category—Airship Rating, Lighter-Than-Air Category—Balloon Rating.	FAA–S–8081–18A, Commercial Pilot Practical Test Standards for Lighter-Than-Air Category, November 2023.
Private Pilot Certificate; Airplane Category—Single-Engine Land Rating, Airplane Category—Single-Engine Sea Rating, Airplane Category—Multiengine Land Rating, Airplane Category—Multiengine Sea Rating.	FAA–S–ACS–6C, Private Pilot for Airplane Category Airman Certification Standards, November 2023.
Private Pilot Certificate; Rotorcraft Category—Helicopter Rating	FAA–S–ACS–15, Private Pilot for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023.
Private Pilot Certificate; Rotorcraft Category—Gyroplane Rating	FAA–S–8081–15B, Private Pilot Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023.
Private Pilot Certificate; Powered-Lift Category	FAA–S–ACS–13, Private Pilot for Powered-Lift Category Airman Certification Standards, November 2023.
Private Pilot Certificate; Glider Category	FAA–S–8081–22A, Private Pilot Practical Test Standards for Glider Category, November 2023.
Private Pilot Certificate; Lighter-Than-Air Category—Airship Rating, Lighter-Than-Air Category—Balloon Rating.	FAA–S–8081–17A, Private Pilot Practical Test Standards for Lighter-Than-Air Category, November 2023.
Private Pilot Certificate; Powered Parachute Category—Land Rating, Powered Parachute Category—Sea Rating, Weight-Shift-Control Aircraft Category—Land Rating, Weight-Shift-Control Aircraft Category—Sea Rating.	FAA–S–8081–32A, Private Pilot Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Category, November 2023.
Recreational Pilot Certificate; Airplane Category—Single-Engine Land Rating, Airplane Category—Single-Engine Sea Rating, Rotorcraft Category—Helicopter Rating, Rotorcraft Category—Gyroplane Rating.	FAA–S–8081–3B, Recreational Pilot Practical Test Standards for Airplane Category and Rotorcraft Category, November 2023.
Sport Pilot Certificate; Airplane Category—Single-Engine Land Privileges, Airplane Category—Single-Engine Sea Privileges, Rotorcraft Category—Gyroplane Privileges, Glider Category.	FAA–S–8081–29A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Airplane Category, Rotorcraft Category, and Glider Category, November 2023.

If you are seeking this certificate, rating, and/or privilege . . .	Then this ACS/PTS (incorporated by reference, see § 61.14) is applicable:
Flight Instructor Certificate with a Sport Pilot Rating; Airplane Category—Single-Engine Privileges, Rotorcraft Category—Gyroplane Privileges, Glider Category.	
Sport Pilot Certificate; Lighter-Than-Air Category—Airship Privileges, Lighter-Than-Air Category—Balloon Privileges.	FAA–S–8081–30A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Lighter-Than-Air Category, November 2023.
Flight Instructor Certificate with a Sport Pilot Rating; Lighter-Than-Air Category—Airship Privileges, Lighter-Than-Air Category—Balloon Privileges.	
Sport Pilot Certificate; Powered Parachute Category—Land Privileges, Powered Parachute Category—Sea Privileges, Weight-Shift-Control Aircraft Category—Land Privileges, Weight-Shift-Control Aircraft Category—Sea Privileges.	FAA–S–8081–31A, Sport Pilot and Sport Pilot Flight Instructor Rating Practical Test Standards for Powered Parachute Category and Weight-Shift-Control Category, November 2023.
Flight Instructor Certificate with a Sport Pilot Rating; Powered Parachute Category Privileges, Weight-Shift-Control Aircraft Category Privileges.	
Instrument Rating—Airplane Instrument Proficiency Check—Airplane ...	FAA–S–ACS–8C, Instrument Rating—Airplane Airman Certification Standards, November 2023.
Instrument Rating—Helicopter Instrument Proficiency Check—Helicopter.	FAA–S–ACS–14, Instrument Rating—Helicopter Airman Certification Standards, November 2023.
Instrument Rating—Powered-Lift Instrument Proficiency Check—Powered-Lift.	FAA–S–ACS–3, Instrument Rating—Powered-Lift Airman Certification Standards, November 2023.
Flight Instructor Certificate; Airplane Category—Single Engine Rating Airplane Category—Multiengine Rating.	FAA–S–ACS–25, Flight Instructor for Airplane Category Airman Certification Standards, November 2023.
Flight Instructor Certificate; Rotorcraft Category—Helicopter Rating	FAA–S–ACS–29, Flight Instructor for Rotorcraft Category Helicopter Rating Airman Certification Standards, November 2023.
Flight Instructor Certificate; Rotorcraft Category—Gyroplane Rating	FAA–S–8081–7C, Flight Instructor Practical Test Standards for Rotorcraft Category Gyroplane Rating, November 2023.
Flight Instructor Certificate; Powered-lift Category	FAA–S–ACS–27, Flight Instructor for Powered-Lift Category Airman Certification Standards, November 2023.
Flight Instructor Certificate; Glider Category	FAA–S–8081–8C, Flight Instructor Practical Test Standards for Glider Category, November 2023.
Flight Instructor Certificate; Instrument—Airplane Rating, Instrument—Helicopter Rating.	FAA–S–8081–9E, Flight Instructor Instrument Practical Test Standards for Airplane Rating and Helicopter Rating, November 2023.
Flight Instructor Certificate; Instrument—Powered-Lift Rating	FAA–S–ACS–28, Flight Instructor—Instrument Rating Powered-Lift Airman Certification Standards, November 2023.
Aircraft Type Rating—Airplane	FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards, November 2023.
Aircraft Type Rating—Helicopter	FAA–S–8081–20A, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Rotorcraft Category Helicopter Rating, November 2023.
Aircraft Type Rating—Powered-Lift	FAA–S–ACS–17, Airline Transport Pilot and Type Rating for Powered-Lift Category Airman Certification Standards, November 2023.
Pilot-in-Command Proficiency Check—Airplane	FAA–S–ACS–11A, Airline Transport Pilot and Type Rating for Airplane Category Airman Certification Standards; November 2023.
Pilot-in-Command Proficiency Check—Helicopter	FAA–S–8081–20A, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Rotorcraft Category Helicopter Rating, November 2023.
Pilot-in-Command Proficiency Check—Powered-Lift	FAA–S–ACS–17, Airline Transport Pilot and Type Rating for Powered-Lift Category Airman Certification Standards, November 2023.

PART 63—CERTIFICATION: FLIGHT CREWMEMBERS OTHER THAN PILOTS

■ 10. The authority citation for part 63 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45302.

■ 11. Revise § 63.39 to read as follows:

§ 63.39 Skill requirements.

(a) An applicant for a flight engineer certificate with a class rating must pass a practical test in the class of airplane for which a rating is sought. To pass the practical test for a flight engineer certificate, the applicant must satisfactorily demonstrate the objectives in the areas of operation specified in the Flight Engineer Practical Test Standards for Reciprocating Engine, Turbopropeller, and Turbojet Powered Aircraft (incorporated by reference, see paragraph (c) of this section). The test may only be given in an airplane specified in § 63.37(a).

(b) The applicant must—

(1) Show that the applicant can satisfactorily perform preflight inspection, servicing, starting, pretakeoff, and postlanding procedures;

(2) In flight, show that the applicant can satisfactorily perform the normal duties and procedures relating to the airplane, airplane engines, propellers (if appropriate), systems, and appliances; and

(3) In flight, in an airplane simulator, or in an approved flight engineer training device, show that the applicant can satisfactorily perform emergency duties and procedures and recognize and take appropriate action for malfunctions of the airplane, engines, propellers (if appropriate), systems and appliances.

(c) FAA–S–8081–21A, Flight Engineer Practical Test Standards for Reciprocating Engine, Turbopropeller, and Turbojet Powered Aircraft, November 2023, is incorporated by reference into this section with the approval of the Director of the Federal

Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved material is available for inspection at the Federal Aviation Administration (FAA) and the National Archives and Records Administration (NARA). Contact FAA, Training and Certification Group, 202–267–1100, *ACSPTSinquiries@faa.gov, www.faa.gov/training_testing.* For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov.* The material may be obtained from FAA, 800 Independence Avenue SW, Washington, DC 20591, 866–835–5322, *www.faa.gov/training_testing.*

PART 65—CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS

■ 12. The authority citation for part 65 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45302.

■ 13. Amend § 65.23 by revising the introductory text and paragraph (a) to read as follows:

§ 65.23 Incorporation by reference.

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. This material is available for inspection at the Federal Aviation Administration (FAA) and at the National Archives and Records Administration (NARA). Contact FAA, Certification and Training Group, 202–267–1100, *ACSPTSinquiries@faa.gov.* For information on the availability of this material at NARA, email *fr.inspection@nara.gov,* or go to *www.archives.gov/federal-register/cfr/ibr-locations.* The material may be obtained from the source in the following paragraph of this section.

(a) Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591, 866–835–5322, *www.faa.gov/training_testing.*

(1) FAA–S–8081–10E, Aircraft Dispatcher Practical Test Standards, November 2023; IBR approved for § 65.59.

(2) FAA–S–8081–25C, Parachute Rigger Practical Test Standards, November 2023; IBR approved for §§ 65.115, 65.119, and 65.123.

(3) FAA–S–ACS–1, Aviation Mechanic General, Airframe, and Powerplant Airman Certification Standards, November 1, 2021; IBR approved for §§ 65.75 and 65.79.

* * * * *

■ 14. Revise § 65.59 to read as follows:

§ 65.59 Skill requirements.

An applicant for an aircraft dispatcher certificate must pass a practical test given by the Administrator, with respect to any one type of large aircraft used in air carrier operations. To pass the practical test for an aircraft dispatcher certificate, the applicant must satisfactorily demonstrate the objectives in the areas of operation specified in the Aircraft Dispatcher Practical Test Standards (incorporated by reference, see § 65.23).

■ 15. Amend § 65.115 by revising paragraphs (a) and (c) to read as follows:

§ 65.115 Senior parachute rigger certificate: Experience, knowledge, and skill requirements.

* * * * *

(a) Present evidence satisfactory to the Administrator that the applicant has packed at least 20 parachutes of each type for which the applicant seeks a rating, in accordance with the manufacturer's instructions and under the supervision of a certificated parachute rigger holding a rating for that type or a person holding an appropriate military rating;

* * * * *

(c) Pass an oral and practical test showing the applicant's ability to pack and maintain at least one type of parachute in common use, appropriate to the type rating the applicant seeks. To pass the oral and practical test for a senior parachute rigger certificate, the applicant must satisfactorily demonstrate the objectives in the areas of operation applicable to a senior parachute rigger specified in the Parachute Rigger Practical Test Standards (incorporated by reference, see § 65.23), appropriate to the type rating sought.

■ 16. Amend § 65.119 by revising paragraphs (a) and (c) to read as follows:

§ 65.119 Master parachute rigger certificate: Experience, knowledge, and skill requirements.

* * * * *

(a) Present evidence satisfactory to the Administrator that the applicant has had at least 3 years of experience as a parachute rigger and has satisfactorily packed at least 100 parachutes of each of two types in common use, in accordance with the manufacturer's instructions—

* * * * *

(c) Pass an oral and practical test showing the applicant's ability to pack and maintain two types of parachutes in common use, appropriate to the type ratings the applicant seeks. To pass the oral and practical test for a master parachute rigger certificate, the applicant must satisfactorily demonstrate the objectives in the areas of operation applicable to a master parachute rigger specified in the Parachute Rigger Practical Test Standards (incorporated by reference, see § 65.23), as appropriate to the type rating sought.

■ 17. Revise § 65.123 to read as follows:

§ 65.123 Additional type ratings: Requirements.

A certificated parachute rigger who applies for an additional type rating must—

(a) Present evidence satisfactory to the Administrator that the applicant has packed at least 20 parachutes of the type for which the applicant seeks a rating, in accordance with the manufacturer's instructions and under the supervision of a certificated parachute rigger holding a rating for that type or a person holding an appropriate military rating; and

(b) Pass a practical test, to the satisfaction of the Administrator, showing the applicant's ability to pack and maintain the type of parachute, appropriate to the type rating sought. To pass the practical test for an additional type rating, the applicant must satisfactorily demonstrate the objectives in the area of operation specified in the Parachute Rigger Practical Test Standards (incorporated by reference, see § 65.23), applicable to the type rating sought.

Issued under authority provided by 49 U.S.C. 106(f), 40113, 44701, 44702, and 44703 in Washington, DC.

Michael Gordon Whitaker,

Administrator.

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