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NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

[NRC–2015–0179]

RIN 3150–AJ64

Cyber Security at Fuel Cycle Facilities

AGENCY: Nuclear Regulatory Commission.

ACTION: Final regulatory basis; availability.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is making available a final regulatory basis document to support a rulemaking that would amend its regulations by adopting new cyber security requirements for certain nuclear fuel cycle facility (FCF) licensees in order to address safety, security, and safeguards consequences of concern. The NRC is not seeking public comments on this document. There will be an opportunity for formal public comment on the proposed rule when it is published in the **Federal Register.**

DATES: The final regulatory basis is publicly available April 12, 2016.

ADDRESSES: Please refer to Docket ID NRC–2015–0179 when contacting the NRC about the availability of information for this document. You may obtain publicly-available information related to this document by any of the following methods:

• *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2015–0179. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

• *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.*

• *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Matthew Bartlett, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–7154; email *Matthew.Bartlett@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

In a September 4, 2015, **Federal Register** document (80 FR 53478), the NRC solicited comment from members of the public on a draft regulatory basis addressing the need for a rulemaking to implement cyber security for FCFs. The public comment period ended on October 5, 2015. The NRC received a total of 9 comment submissions from nongovernment organizations and industry. The NRC staff reviewed and considered the comments in finalizing the regulatory basis. The final regulatory basis is available in ADAMS under Accession No. ML15355A466 or on the Federal rulemaking Web site, *www.regulations.gov,* under Docket ID NRC–2015–0179.

II. Publicly-Available Documents

As the NRC continues its ongoing proposed rulemaking effort to implement cyber security requirements for FCFs in part 73 of title 10 of the *Code of Federal Regulations,* the NRC is making documents publicly available on the Federal rulemaking Web site, *www.regulations.gov,* under Docket ID NRC–2015–0179. By making these documents publicly available, the NRC seeks to inform stakeholders of the current status of the NRC's rulemaking development activities and to provide preparatory material for future public meetings.

The NRC may post additional materials relevant to this rulemaking at *www.regulations.gov,* under Docket ID NRC–2015–0179. Please take the following actions if you wish to receive alerts when changes or additions occur in a docket folder: (1) Navigate to the docket folder (NRC–2015–0179); (2) click the ''Email Alert'' link; and (3) enter your email address and select how frequently you would like to receive emails (daily, weekly, or monthly).

III. Plain Writing

The Plain Writing Act of 2010, (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, well-organized manner that also follows other best practices appropriate to the subject or field and the intended audience. Although regulations are exempt under the Act, the NRC is applying the same principles to its rulemaking documents. Therefore, the NRC has written this document to be consistent with the Plain Writing Act.

Dated at Rockville, Maryland, this 1st day of April, 2016.

For the Nuclear Regulatory Commission.

Shana R. Helton,

Acting Deputy Director, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2016–08324 Filed 4–11–16; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 61 and 141

[Docket No.: FAA–2015–1846; Amdt. Nos. 61–136, 141–18]

RIN 2120–AK71

Aviation Training Device Credit for Pilot Certification

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

ACTION: Final rule.

SUMMARY: This rulemaking relieves burdens on pilots seeking to obtain aeronautical experience, training, and certification by increasing the allowed use of aviation training devices. These actions are necessary to bring the regulations in line with the current

capabilities of aviation training devices and the needs and activities of the general aviation training community and pilots.

DATES: This rule is effective May 12, 2016.

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.

FOR FURTHER INFORMATION CONTACT: Marcel Bernard, Airmen Certification and Training Branch, Flight Standards Service, AFS–810, Federal Aviation Administration, 898 Airport Park Road, Suite 204, Glen Burnie, MD 21061; telephone: (410) 590–5364 x235 email *marcel.bernard@faa.gov.*

SUPPLEMENTARY INFORMATION:

I. Executive Summary

This rule finalizes the notice of proposed rulemaking (NPRM) regarding the use of aviation training devices for pilot certification. 80 FR 34338 (Jun. 16, 2015). The NPRM proposed to increase the maximum time that may be credited in an aviation training device (ATD) toward the aeronautical experience requirements for an instrument rating under § 61.65(i). The NPRM proposed to permit a person to credit a maximum of 20 hours of aeronautical experience acquired in an approved ATD toward the requirements for an instrument rating. By letter of authorization (LOA), devices that qualify as advanced aviation training devices (AATDs) were proposed to be authorized for up to 20 hours of experience to meet the instrument time requirements. Devices that qualify as basic aviation training devices (BATDs) were proposed to be authorized, by LOA, for a maximum of 10 hours of experience to meet the instrument time requirements.

Based on the comments received to the NPRM, the FAA is revising § 61.65 to include a specified allowance of 10 hours for BATDs and 20 hours for AATDs in part 61 (combined use not to exceed 20 hours) for the instrument rating.

The NPRM also addressed the use of ATDs in approved instrument rating courses. The NPRM proposed to amend appendix C to part 141 to increase the limit on the amount of training hours that may be accomplished in an ATD in an approved course for an instrument rating. The FAA proposed to allow ATDs to be used for no more than 40% of the total flight training hour requirements in an approved instrument rating course.

Based on the comments received to the NPRM, the FAA is revising appendix C to part 141 to include a specified allowance of 25% of creditable time in BATDs [1] and 40% of creditable time for AATDs under part 141 (not to exceed 40% total time) for the instrument rating.

Currently, § 61.65(i) requires a pilot who is logging instrument time in an ATD to wear a view-limiting device. The NPRM proposed to revise § 61.65(i)(4) to eliminate the requirement that pilots accomplishing instrument time in an ATD wear a view-limiting device. The FAA is finalizing this proposal without change.

II. Authority for This Rulemaking

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

This rulemaking is promulgated under the authority described in 49 U.S.C. 106(f), which establishes the authority of the Administrator to promulgate regulations and rules; 49 U.S.C. 44701(a)(5), which requires 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; and 49 U.S.C. 44703(a), which requires 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.

III. Background

Since the 1970s, the FAA has gradually expanded the permitted use of flight simulation for training—first permitting simulation to be used in air carrier training programs and eventually permitting pilots to credit time in devices toward the aeronautical experience requirements for airman certification and recency. Currently, title 14 of the Code of Federal Regulations (14 CFR) part 60 governs the qualification of flight simulation training devices (FSTDs), which include full flight simulators (FFSs) level A through D and flight training devices (FTDs) levels 4 through 7. The FAA has, however, approved other devices, including ATDs, for use in pilot certification training, under the authority provided in 14 CFR 61.4(c).[2]

For over 30 years, the FAA has issued LOAs to manufacturers of ground trainers, personal computer-based aviation training devices (PCATD), FTDs (levels 1 through 3), BATDs, and AATDs. These LOAs were based on guidance provided in advisory circulars (ACs) that set forth the qualifications and capabilities for the devices. Prior to 2008, most LOAs were issued under the guidance provided in AC 61–126, Qualification and Approval of Personal Computer-Based Aviation Training Devices, and AC 120–45, Airplane Flight Training Device Qualification. Starting in July 2008, the FAA approved devices in accordance with AC 61–136, FAA Approval of Basic Aviation Training Devices (BATD) and Advanced Aviation Training Devices (AATD). More recently, on December 3, 2014, the FAA published a revision to AC 61–136A, Approval of Aviation Training Devices and Their Use for Training and Experience.

In 2009, the FAA issued a final rule that for the first time introduced the term ''aviation training device'' into the regulations and placed express limits on the amount of instrument time in an ATD that could be credited toward the aeronautical experience requirements for an instrument rating.[3]

Since the 2009 final rule, § 61.65(i) has provided that no more than 10 hours of instrument time received in an ATD may be credited toward the instrument time requirements of that section. In addition, appendix C to part 141 permits an ATD to be used for no more than 10% of the total flight training hour requirements of an approved course for an instrument rating.

Prior to the 2009 final rule, the FAA had issued hundreds of LOAs to

[1] If a course of training is approved under the minimum requirements as prescribed in part 141, appendix C, for the instrument rating (35 hours of training required), 25% in a BATD would equate to 8.75 hours and 40% in an AATD would equate to 14 hours.

[2] Section 61.4(c) states that the ''Administrator may approve a device other than a flight simulator or flight training device for specific purposes.''

[3] In a 2007 NPRM, the FAA proposed to limit the time in a personal computer-based aviation training device that could be credited toward the instrument rating. *Pilot, Flight Instructor, and Pilot School Certification* NPRM, 72 FR 5806 (Feb. 7, 2007). Three commenters recommended that the FAA use the terms ''basic aviation training device'' (BATD) and ''advanced aviation training device'' (AATD). *Pilot, Flight Instructor, and Pilot School Certification* Final Rule, 74 FR 42500 (Aug. 21, 2009) (''2009 Final Rule''). In response to the commenters, the FAA changed the regulatory text in the final rule to ''aviation training device,'' noting BATDs and AATDs ''as being aviation training devices (ATD) are defined'' in an advisory circular.

manufacturers of devices that permitted some ATDs (as well as ground trainers, and FTDs (levels 1 through 3)) to be used to a greater extent than was ultimately set forth in the regulations. The FAA continued to issue LOAs for AATDs in excess of the express limitations in the regulations after the publication of the 2009 final rule.

On January 2, 2014, the FAA published a notice of policy requiring manufacturers of ATDs to obtain new LOAs reflecting the appropriate regulatory allowances for ATD use. 79 FR 20.[4] The notice of policy stated the FAA's conclusion that it could not use LOAs to exceed express limitations that had been placed in the regulations through notice and comment rulemaking. The FAA noted that, since August 2013, LOAs issued for new devices reflect current regulatory requirements. However, manufacturers and operators who held LOAs issued prior to August 2013 acted in reliance on FAA statements that were inconsistent with the regulations. Therefore, the FAA granted a limited exemption from the requirement in the regulations to provide manufacturers, operators, and pilots currently training for an instrument rating time to adjust to the reduction in creditable hours. This short-term exemption was intended to provide an interim period to transition the LOAs for all previously approved devices in accordance with the new policy. The FAA found the exemption to be in the public interest in order to prevent undue harm caused by reasonable reliance on the LOAs.

As stated in the notice of policy, this short term exemption expired on January 1, 2015. The FAA explained that after that date, no applicant training for an instrument rating under part 61 may use more than 10 hours of instrument time in an ATD toward the minimum aeronautical experience requirements required to take the practical test for an instrument rating.[5] In addition, no instrument rating course approved under appendix C to part 141 may credit more than 10% of training in ATDs toward the total flight training hour requirements of the course (unless that program has been approved in accordance with § 141.55(d) or (e)).[6]

To address the discrepancy between the level of ATD credit allowed historically by LOA and the lower allowances placed in the regulations, the FAA published a direct final rule that would have amended the regulations governing the use of ATDs.[7] The direct final rule would have increased the use of these devices for instrument training requirements above the levels established in the 2009 final rule. In developing this direct final rule, the FAA noted that ATD development has advanced to an impressive level of capability. Many ATDs can simulate weather conditions with variable winds, variable ceilings and visibility, icing, turbulence, high definition (HD) visuals, hundreds of different equipment failure scenarios, navigation specific to current charts and topography, specific navigation and communication equipment use, variable ''aircraft specific'' performance, and more. The visual and motion component of some of these devices permit maneuvers that require outside visual references in an aircraft to be successfully taught in an AATD. Many of these simulation capabilities were not possible in previously approved devices (such as PCATDs).

In the direct final rule, the FAA stated its belief that permitting pilots to log increased time in ATDs would encourage pilots to practice maneuvers until they are performed to an acceptable level of proficiency. In an ATD, a pilot can replay the training scenario, identify any improper action, practice abnormal/emergency procedures, and determine corrective actions without undue hazard or risk to persons or property. In this fashion, a pilot can continue to practice tasks and maneuvers in a safe, effective, and cost efficient means of maintaining proficiency.

IV. The Direct Final Rule

As described in the previous section, to address the discrepancy between FAA regulations and prior policy, on December 3, 2014, the FAA published a direct final rule that would have increased the allowed use of ATDs. The FAA received 20 comments to the direct final rule.[8]

Credit for aeronautical experience requirements for an instrument rating: The direct final rule would have increased the maximum time that may be credited in an ATD toward the aeronautical experience requirements for an instrument rating under § 61.65(i). The direct final rule would have permitted a person to credit a maximum of 20 hours of aeronautical experience acquired in an approved ATD toward the requirements for an instrument rating. Devices that qualify as AATDs would have been authorized for up to 20 hours of experience to meet the instrument time requirements. Devices that qualify as BATDs would have been authorized for a maximum of 10 hours of experience to meet the instrument time requirements.

Approved instrument rating courses: The direct final rule also would have amended appendix C to part 141 to increase the limit on the amount of training hours that may be accomplished in an ATD in an approved course for an instrument rating. An ATD would have been permitted to be used for no more than 40% of the total flight training hour requirements in an approved instrument rating course.

Comments received: The FAA received 20 comments regarding these provisions. Eighteen comments supported the provisions. However, two commenters raised concerns. As those comments were adverse to the direct final rule, the FAA was required to withdraw the direct final rule, 80 FR 2001, (Jan. 15, 2015). 14 CFR 11.13. The comments received to the direct final rule and FAA's responses were discussed in the notice of proposed rulemaking published June 16, 2015. 80 FR 34338.

View-limiting devices: Under § 61.51(g), a person may log instrument time only for that flight time when the person operates an aircraft solely by reference to the instruments under actual or simulated conditions. When instrument time is logged in an aircraft, a pilot wears a view-limiting device to simulate instrument conditions and ensure that he or she is flying without utilizing outside visual references. Currently, § 61.65(i) requires a pilot who is logging instrument time in an ATD to wear a view-limiting device. The direct final rule would have revised § 61.65(i)(4) to eliminate the requirement that pilots accomplishing instrument time in an ATD wear a view-limiting device.

The purpose of a view-limiting device is to prevent a pilot (while training in an aircraft during flight) from having outside visual references that would naturally be present otherwise. These references are not available in a training device and a pilot has no opportunity to look outside for any useful visual references pertaining to the simulation. The FAA recognizes that the majority of these devices have a simulated visual

[4] ''Notice of Policy Change for the Use of FAA Approved Training Devices,'' January 2, 2014.

[5] Under § 61.65, a person who applies for an instrument rating must have completed 40 hours of actual or simulated instrument time of which 15 hours must have been with an authorized instructor who holds the appropriate instrument rating.

[6] Under appendix C, each approved course for an instrument rating must include 35 hours of instrument training for an initial instrument rating or 15 hours of instrument training for an additional instrument rating.

[7] 79 FR 71634, Dec. 3, 2014, withdrawn at 80 FR 2001, Jan. 15, 2015 (RIN 2120–AK62).

[8] The direct final rule and the comments received thereto may be found in FAA Docket No. FAA–2014–0987 at *http://www.regulations.gov.*

display that can be configured to be unavailable or represent ''limited visibility'' conditions that preclude any need for a view-limiting device to be worn by the student. This lack of visual references requires the pilot to give his or her full attention to the flight instruments which is the goal of any instrument training or experience. The FAA believes that using a training device can be useful because it trains the pilot to focus on, appropriately scan and interpret the flight instruments. Since these devices incorporate a visual system that can be configured to the desired visibility level, use of a view-limiting device would have no longer been required by the direct final rule.

When the FAA introduced § 61.65(i)(4) requiring view-limiting devices in the 2009 final rule, the preamble was silent as to why a view-limiting device was necessary. 74 FR 42500, 42523. Based on comments from industry, the FAA has determined that due to the sophistication of the flight visual representation for ATDs and the capability of presenting various weather conditions appropriate to the training scenario, a view-limiting device is unnecessary. Because persons operating an ATD can simulate both instrument and visual conditions, FAA LOAs specifically reference § 61.51 that stipulates a pilot can log instrument time only when operating the aircraft solely by reference to the instruments in actual or simulated instrument flight conditions.[9]

Comments received: The FAA received one comment in response to this provision in the direct final rule. The comment received to the direct final rule and FAA's response were discussed in the notice of proposed rulemaking published June 16, 2015. 80 FR 34338.

V. The Proposed Rule

After consideration of the comments received to the direct final rule, on June 16, 2015, the FAA published a notice of proposed rulemaking (80 FR 34338) proposing the following changes to 14 CFR parts 61 and 141. These changes were the same as in the direct final rule, 79 FR 71634, (Dec. 3, 2014), withdrawn at 80 FR 2001, (Jan. 15, 2015).

The FAA received a total of 60 comments to the notice of proposed rulemaking, 50 from individuals; five from flight schools; three from organizations representing pilots and flight instructors, including the Society of Aviation and Flight Educators (SAFE), the Aircraft Owners and Pilots Association (AOPA), and the National Association of Flight Instructors (NAFI); one from an anonymous commenter purporting to represent Garmin International; and one from ATD manufacturer Redbird Flight Simulations. The proposed provisions, the comments received, and FAA's responses are discussed in the following sections.

A. Credit for the Aeronautical Experience Requirements for an Instrument Rating and Approved Instrument Rating Courses

The FAA proposed to increase the maximum time that may be credited in an ATD toward the instrument time requirements for an instrument rating under § 61.65(i). A person would be permitted to credit a maximum of 20 hours of instrument time in an approved ATD toward the requirements for an instrument rating.[10] Devices that qualify as AATDs would be authorized for up to 20 hours of instrument time. Devices that qualify as BATDs would be authorized for a maximum of 10 hours of instrument time. In light of this difference, pilots must—as required by current regulations—include in their logbooks the type and identification of any ATD that is used to accomplish aeronautical experience requirements for a certificate, rating, or recent flight experience. 14 CFR 61.51(b)(1)(iv). The FAA is retaining the existing limit of 20 hours of combined time in FFSs, FTDs, and ATDs that may be credited towards the aeronautical experience requirements for an instrument rating.

The FAA also proposed to amend appendix C to part 141 to increase the limit on the amount of training hours that may be accomplished in an ATD in an approved course for an instrument rating. An ATD could be used for no more than 40% of the total flight training hour requirements in an instrument rating course. The proposed rule did not change the current provisions in appendix C which limit credit for training in FFSs, FTDs, and ATDs, that if used in combination, cannot exceed 50% of the total flight training hour requirements of an instrument rating course.

In addition, the FAA proposed to amend § 141.41 to clarify the existing qualification and approval requirement for FSTDs and to add the qualification and approval of ATDs by the FAA, which is currently conducted pursuant to § 61.4(c).

1. Comments Supporting the Proposed Provisions

The FAA received 57 comments in support of these proposed provisions, with 47 from individuals and 10 from organizations. Of the 57 comments received in support of the proposed rule, five recommended changes to the proposed regulations.

Nineteen individual commenters provided general support for the proposed rule. Nine commenters who identified themselves as pilots who had used ATDs for their own training provided support for the rule. They emphasized the value of being able to have a flight instructor pause the training, discuss the scenario, provide instant feedback and additional instruction, and then continue the training session. These individuals also believed that their training was enhanced by the ability to focus on the specific training tasks and ensure accurate, appropriate learning of the lesson. Commenters also noted that in an ATD instructors can focus solely on teaching rather than dividing their focus between teaching important instrument skills and general aircraft operations.

Commenters also emphasized the value of being presented with training scenarios that cannot be accomplished safely in the aircraft. Commenters cited emergency procedures, flight into thunderstorms, icing, and turbulent conditions as primary examples of conditions that can be simulated safely in ATDs.

SAFE, NAFI, and Redbird Flight Simulations also noted the ability of current ATDs to simulate a variety of aircraft types and configurations, as well as to simulate various conditions inside and outside the aircraft.

A number of individual commenters also noted the value, both financial and time saving, of accomplishing more repetitions in the same amount of time when using an ATD as opposed to using an aircraft. Two individual commenters estimated that time in an approved simulator with an instructor costs about $100 per hour, while dual time in an instrument flight rules-certified aircraft is $200 per hour or more. These commenters asserted that adding an extra 10 hours of simulator time cuts $1,000 from the overall training cost. NAFI also noted that because the training is independent of weather and air traffic control conditions, a training syllabus can be followed more closely with use of the ATDs and the student can avoid unplanned, non-productive

[9] AC 61–136A Appendix 4, Training Content and Logging Provisions references limitations for logging instrument time.

[10] As required under § 61.51(g)(4), to log instrument time in an ATD for the purpose of a certificate or rating, an authorized instructor must be present.

time delays when attempting to practice a procedure.

Thirteen commenters who identified themselves as flight instructors supported the rule. They echoed the sentiments of those commenters who identified themselves as pilots who had used ATDs for their own training. Commenters discussed the belief that ATDs save lives, reduce training time and cost, reduce atmospheric and noise pollution, and produce safer pilots. They particularly noted the ability to train scenarios that would not be trained using an aircraft—thunderstorms, icing, etc. They emphasized the value of scenario-based training, followed closely by training in an aircraft. These commenters noted the importance of being able to train students regarding emergency procedures using meaningful repetition, until the commenters confirm the student's mastery of those skills. AOPA supported this view, stating that simulator training for an instrument rating allows instructors to provide a safer, more effective training experience. Redbird Flight Simulations also supported this view, stating that the ATD is the ideal place to learn, ask questions and practice, and the aircraft is the place where the student demonstrates what he or she has learned and can focus on gaining real-world flying experience with the basic fundamental instrument skills already engrained.

A few commenters noted that students whom they had trained initially in ATDs found the experience so useful that they returned for recurrent training in those same ATDs. One commenter noted FAA's inferred endorsement of the use of AATDs in Instrument Practical Test Standard (FAA–S–8081–4E, Chg 5) by the inclusion of tasks for an instrument proficiency check which may be credited using an AATD.

Five commenters commenting on behalf of flight schools also concurred with these comments. These commenters discussed the ability for pilots to practice situations and procedures that would not ''normally'' be possible to accomplish safely in an aircraft, including various weather conditions and simulated instrument failures. Commenters focused on the unique training that ATDs allow instructors to provide. As two commenters noted,

> Aircraft are not classrooms and as such they are poor environments for learning. The AATDs allow for students experiencing difficult learning situations the opportunity to repeat the lesson easily, safely and as frequently as needed. Importantly, the instructor is able to focus entirely on teaching rather than splitting his/her attention on traffic, ATC instructions and safe aircraft operation.[11]

These commenters emphasized that ATDs are only one component of the training curriculum and process, and that all learning in an ATD would be accompanied by training in the aircraft. They also noted that ATDs and aircraft do not replace each other. NAFI agreed, pointing out that a significant portion of training would still be required in an aircraft under the proposed regulations.

Commenters, including SAFE and several individuals, noted the use of simulators by other industries, including the United States military and air carriers. SAFE specifically cited a 1998 United States Air Force study regarding the transfer of training effectiveness.[12]

FAA Response: The FAA agrees with the commenters who support increased training time allowances in ATDs, including the statements discussing the increased dynamic training capability of these devices, cost savings, time savings, effective use of scenario-based training, and recent technical advancements that enhance the capabilities of ATDs. With over 30 years of experience evaluating, approving, and providing oversight for FSTDs and over 10 years approving ATDs, the FAA recognizes their evolving capabilities, safety benefits, and improved design justifying their increased use and credit for minimum pilot experience requirements.

One commenter noted the safety benefit of ATDs related to decommissioning of very high frequency omni-directional radio range (VORs), non-directional beacons (NDBs), the scarcity of localizer back-courses, and scarcity of outer markers. The commenter noted that the practical test standards still require the demonstration of a VOR approach for an instrument candidate. As the commenter explained:

> Thus, instrument instructors must use a more limited set of VORs to conduct VOR instrument approach training, resulting in greater congestion around VORs during training maneuvers. Numerous FAA publications suggest avoiding concentrations around VORS, such as FAA–P–8740–51, 'How to Avoid a Midair Collision.' When one considers finding VOR approaches located on the airport (without a final approach fix) and those conducted off airport (those with a final approach fix), the amount of time an instructor must spend exposed to the risk of a midair collision is quite large. The risk of a midair collision is non-existent in an ATD.[13]

FAA Response: The FAA agrees with the commenter that ATDs provide for unlimited choices when practicing electronic navigation, including instrument approaches, and the safety advantages afforded in these training devices. Traffic conflicts and geographic location are not a limitation when training in an FSTD or ATD. ATDs come with a database affording significant navigational choices. Advantages include executing navigation or instrument approach procedures to an airport that a pilot may not have experienced or executed in flight before.

2. Comments Providing Institutional Research Related to the Notice of Proposed Rulemaking

In the NPRM, the FAA specifically sought ''. . . comment regarding any additional relevant data or institutional research that supports the training and safety advantages when using ATDs, or establishes that such devices do not enhance pilot training and flight safety.'' [14]

The FAA received two comments that specifically addressed this request.

One individual commenter cited an unpublished dissertation [15] that the commenter believed supported the use of ATDs. The commenter stated:

> In her dissertation study, Kearns compared simulators far less capable then [sic] ATDs to a guided mental practice experimental technique. Though her results did not specifically evaluate ATDs, Kearn [sic] demonstrated how ATD-level simulators (and guided mental practice) effectively train skills enhancing mental workload and situational awareness.[16]

FAA Response: The FAA obtained and reviewed the unpublished Kearns dissertation.

The study author described the study as follows:

> The purpose of this investigation was to assess the feasibility of guided mental practice, as an instructional strategy, embedded within an asynchronous computer-based non-technical training program for pilots. Two asynchronous computer-based single pilot resource management (SRM) training programs were developed for the study, varying only in the

[11] Stephen Cunningham, Docket No. FAA–2015–1846–0034. Anonymous, Docket No. FAA–2015–1846–0038.

[12] Carretta, Thomas R., and Dunlap, Ronald D. ''Transfer of Training Effectiveness in Flight Simulation: 1986–1997.'' United States Air Force Research Laboratory, 1998. *http://www.dtic.mil/get-tr-doc/pdf?AD=ADA362818.*

[13] Anonymous, Docket No. FAA–2015–1846–0035.

[14] 80 FR 34338 at 34342.

[15] Kearns, S. (2007). ''The Effectiveness of Guided Mental Practice in a Computer-Based Single Pilot Resource Management (SRM) Training,'' Ph.D. Dissertation, Capella University).

[16] Anonymous, Docket No. FAA–2015–1846–0035.

method of active practice. One version incorporated hands-on practice and another utilized a form of mental practice, termed guided mental practice. The term guided mental practice was developed to describe the process of mental practice which is facilitated by a computer-based training program, such as through the presentation of a video of a flight simulator scenario.[17]

The study author defined guided mental practice as:

> . . . practice that took place without any hands-on interaction yet was facilitated by a computer-based flight simulator scenario embedded within an asynchronous online SRM training program. Participants were asked to view a video of a flight simulator in a particular scenario and imagine themselves as the pilot of the flight. Guided mental practice differs from traditional mental practice, which is typically an entirely internal process, as an external medium guides the learner through the practice exercise.[18]

Three groups were formed in the study (a) SRM training with hands-on practice, (b) SRM training with mental practice, and (c) a control group that received no training. The study used a sample size of 12 participants per condition.[19] All three groups of participants completed a high-fidelity flight simulator evaluation in which metrics assessed their situation awareness and mental workload, the two constructs targeted in the SRM training program.

The study found that although no difference existed between the practice conditions, groups that completed training with either hands-on or mental practice demonstrated improved situation awareness over the group that did not receive any training as measured by the situation awareness global assessment technique (SAGAT). Significant findings were not found with either of the metrics meant to assess workload: The National Aeronautics and Space Administration's task load index (NASA–TLX), and secondary task (ST) metrics.[20]

While this study did not directly address whether ATDs or other simulators provide benefit by increasing learning of piloting skills, it does appear to indicate that deliberate practice is important to pilot training, and that any practice, whether in a simulator or watching a video of a simulation and imagining oneself as the pilot, is more beneficial than no use of simulation at all in advance of the skill evaluation. While the FAA believes that this study may provide useful information for its area of interest, the study was not focused on the decision point the FAA was considering regarding whether to move forward with this regulatory change—that is, data or institutional research that supports the training and safety advantages when using ATDs, or establishes that such devices do not enhance pilot training and flight safety. Situational awareness is one of many elements to be considered in evaluating pilot training and safety. The study did not consider whether skill sets were better learned by use of either guided mental practice or hands-on use of a simulator as compared with training in an aircraft only.

SAFE asserted that research shows that when properly utilized as part of a comprehensive training program such training devices actually speed up the learning process by allowing students to bypass areas of successful understanding and to concentrate on areas where more understanding and practice is required.[21]

FAA Response: The abstract of the study cited by SAFE reads as follows:

> The purpose of this report was to review recent studies regarding the effectiveness of flight simulators as augmentation for ''hands-on'' flying training. Simulation-based training has been proposed to reduce costs, extend aircraft life, maintain flying proficiency, and provide more effective training, especially in areas difficult to train in operational aircraft. A review of the literature from 1986 to 1997 identified 67 articles, conference papers, and technical reports regarding simulator flying training and transfer. Of these, only 13 were related directly to transfer of training from the simulator to the aircraft. Studies of simulator effectiveness for training landing skills constituted a majority of the transfer studies, although a few examined other flying skills such as radial bombing accuracy and instrument and flight control. Results indicate that simulators are useful for training landing skills, bombing accuracy, and instrument and flight control. Generally, as the number of simulated sorties increases, performance improves, but this gain levels off after approximately 25 missions. Further, several studies indicate that successful transfer may not require high-fidelity simulators or whole-task training, thus reducing simulator development costs.
>
> Evaluation of this literature is difficult for many reasons. Typically, researchers fail to report sufficient detail regarding research methods, training characteristics, and simulator fidelity. In addition to these methodological concerns, there is a lack of true simulator-to-aircraft transfer studies involving complex pilot skills. This may be due to problems such as inadequate simulator design, cost, and availability, and access to simulators in operational flying units. Future directions in simulator transfer of training are discussed.[22]

Their literature review found that numerous studies conducted between 1986 and 1997 indicated that simulators were found to be useful for training landing skills. As the number of simulated sorties increased, performance increased, but the performance gain appeared to level off after approximately 25 missions. Two other studies considered for the literature review suggest that simulators provide an effective means to train instrument procedures and flight control. The results suggest that in order to produce transfer to the aircraft it may be necessary to train only the critical components of the task rather than the whole task. Authors emphasized the limitations of the literature review, including a lack of information regarding the simulator fidelity characteristics, research methods, and training characteristics among other challenges.

While the FAA found this literature review to provide some limited support for the agency's position, the review did not provide significant support for this position. Given the lack of information regarding simulators used, the effectiveness of the skills transfer, and the age of the review itself, it is likely that the literature review cannot be used to directly support the FAA's position. The FAA notes that FSTD and ATD technology has evolved significantly since this literature review was written and for that reason alone it is possible that studies conducted today would show different conclusions regarding the effectiveness of skill transfer, as simulators at all levels are more realistic and have greater information from which to provide simulation than that which existed 20 years ago.

Nonetheless, the FAA agrees that the use of ground based training devices in advance of flight training in an aircraft speeds up the overall process of learning. The FAA believes that practice decreases the time required in an actual aircraft to reach a level of proficiency required to successfully complete a practical test for a pilot certificate or rating. The Air Force research paper referenced by SAFE supports this assertion, but does not directly address the current capabilities of ATDs.

The individual commenter also believed that allowing increased hours in ATDs would increase economic demand for ATDs, thereby increasing competition and resulting in lower ATD

[17] Kearns, at 80.

[18] Kearns, at 12.

[19] Kearns, at 63.

[20] Kearns, at 82–83.

[21] Carretta, Thomas R., and Dunlap, Ronald D. ''Transfer of Training Effectiveness in Flight Simulation: 1986–1997.'' United States Air Force Research Laboratory, 1998. *http://www.dtic.mil/get-tr-doc/pdf?AD=ADA362818.*

[22] Ibid.

prices and increased ATD innovation. The commenter cited a textbook that he or she believed supported this position.[23] The commenter further asserted that this increased competition will increase the quality of ATDs. The commenter compared the current situation regarding the use of ATDs to digital chart maturation,[24] arguing that when regulation is applied inappropriately, innovation may be stifled. Thus, the commenter asserted, expanded use of ATDs has derivative benefits consistent with a long-term view of aviation and safety.

FAA Response: The FAA generally agrees that permitting the greater use of ATDs may increase the demand for ATDs. In turn, the increased demand for ATDs may result in more firms entering the market, increasing competition, and perhaps in more technical innovation in ATDs. The FAA, however, restricts the economic impact analysis to the initial impact, as each succeeding economic impact is more speculative.

As noted previously, the intent of the specific request for information was to seek any additional relevant data or institutional research that supports the training and safety advantages when using ATDs, or establishes that such devices do not enhance pilot training and flight safety. The intent of this regulation is not to foster development of ATDs. The FAA emphasizes that even without this regulation persons are permitted to use ATDs and FSTDs to gain further experience in addition to any time that may be expressly creditable when using ATDs or FSTDs under the regulations.

Finally, the commenter asserted that economic growth of ATDs will offer enhanced applications of ATDs by researchers and innovators, contributing to aviation safety.[25] The commenter argued that ATD maturation in operational training environments will enable such forward-thinking training frameworks.

FAA Response: The FAA agrees that it is likely that the purchase and use of ATDs will increase with the additional FAA allowances provided for minimum pilot experience requirements. Additionally, the Tuccio research paper referenced by the commenter generally supports the use of simulation in aviation pilot training specific to heuristics[26] but does not speak directly to any particular simulator design or capability.

3. Comments Supporting the Proposed Provisions With Changes

The FAA received five comments supporting the proposed rule but recommending changes to the proposed regulations. One commenter noted that in the proposed rule the FAA differentiated between the number of hours that were proposed to be credited toward the aeronautical experience requirements in an AATD (20 hours) versus a BATD (10 hours). The commenter noted that these differences were not stipulated in the proposed text of 14 CFR 61.65(i) regarding credit for aeronautical experience for the instrument rating, and that no differentiation was made between AATDs and BATDs in part 141 regarding approved instrument rating courses—either in the preamble or the regulatory text.

FAA Response: The FAA agrees with the commenter and believes that providing explicit and separate regulatory allowances for BATDs and AATDs, as currently provided in the FAA LOAs, is appropriate. Specificity in the regulation will better inform individuals receiving instrument training as to the appropriate allowances for the different levels of ATDs. Therefore, in this final rule the FAA is revising § 61.65 and appendix C to part 141 to include a specified allowance of 10 hours for BATDs and 20 hours for AATDs in part 61 (combined use not to exceed 20 hours), and 25% of creditable time in BATDs and 40% of creditable time for AATDs under part 141 (not to exceed 40% total time) for the instrument rating.

Currently, under the conditions and limitations set forth in the LOAs, training providers must provide copies of LOAs to people who receive training in the device. By providing a copy of the LOA, pilots who receive training will know the amount of training that may be logged in the device for the purpose of meeting the aeronautical experience requirements for a certificate or rating.

The same commenter believed that there could be confusion regarding the amount of time that can be credited when using a BATD, and when using percentages of simulator, FTD, AATD and BATD time that can be used in combination. For example, the commenter asserted that under appendix C to part 141, section 4(b)(4) as proposed, providing 40% of the required training in a BATD and 10% in a simulator would satisfy the letter of the rule.

FAA Response: As discussed previously, the FAA agrees with the commenter and is providing for separate specific regulatory allowances for BATDs and AATDs and clarifying the total creditable percentages of time when using BATDs and AATDs in combination with other FAA approved training devices.

The same commenter believed that the FAA was being inconsistent in its treatment of time that could be credited when using a BATD in part 61 versus part 141. The commenter noted that the FAA had proposed that 10 hours of the 40 hours required could be obtained using a BATD under part 61 (25% of the hours needed), whereas the FAA had proposed that 10% of the hours could be credited in a BATD under part 141 (3.5 hours).[27] Based on the commenter's understanding of the FAA proposal, the commenter recommended that the total number of hours that could be credited when using a BATD under part 141 be increased to 20% of the total hours (7 hours of the 35 hours required).

FAA Response: The FAA agrees with the commenter and will provide a consistent allowance in the regulation for ATD credit when using a BATD or AATD under part 61 and part 141. To provide a consistent allowance under part 141 training requirements for the instrument rating, in this final rule the FAA is allowing up to a 25% credit (8.75 hours) when using a BATD for the minimum training time requirements.

One commenter noted that the FAA does not differentiate regarding the use of AATDs versus BATDs anywhere else in part 141. The commenter believed that by differentiating AATDs from BATDs, it would now be possible to allow credit for AATD use toward flight times for private pilot, commercial pilot, flight instructor and additional rating courses. Another commenter requested that the FAA consider expanding the utilization of these devices for the private pilot rating as well from the current 2.5 hours to 10 hours. Another

[23] Vasigh, B., Fleming, K., Tacker, T. (2008) Introduction to Air Transport Economics: From Theory to Applications. Burlington, VT: Ashgate). *http://www.ashgate.com/default.aspx?page=637&calcTitle=1&isbn=9781409454878&lang=cy-GB.*

[24] Tuccio, W.A. (2013). Aviation Approach Charts in an iPad World. Journal of Navigation, 66(1). Retrieved from *http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8777261&fileId=S0373463312000409.*

[25] Tuccio, W.A. (2011). Heuristics to Improve Human Factors Performance in Aviation. Journal of Aviation/Aerospace Education & Research, 20(3). from *http://commons.erau.edu/jaaer/vol20/iss3/8.*

[26] Heuristics Merriam-Webster definition: Involving or serving as an aid to learning, discovery, or problem-solving by experimental and especially trial-and-error methods <heuristic techniques> <a heuristic assumption>; also: Of or relating to exploratory problem-solving techniques that utilize self-educating techniques (as the evaluation of feedback) to improve performance <a heuristic computer program>.

[27] The 3.5 hours reflects 10% of the 35 hours of instrument training that is the minimum curriculum hours under appendix C to part 141.

commenter requested that appendix G of part 141 be revised to permit flight instructors to use AATDs in their own training. The commenter asserted that if instrument instructors are to teach effectively in ATDs, then it is logical those same instructors should use ATDs during their own training in order to realize economic and safety benefits of ATDs similar to those provided by the new rule under appendix C to part 141, and learn effective ATD training techniques. Yet another commenter suggested expanding the creditable use of ATDs to all certificates—airline transport pilot, commercial, private, flight instructor, etc.

FAA Response: The FAA agrees with the commenters and is providing separate regulatory allowances for BATDs and AATDs as described previously and clarifying the amount of creditable time when BATDs and AATDs are used in combination with FSTDs for instrument training. The FAA notes that part 61 provides time allowances for private pilot, commercial pilot, and airline transport pilot in an FSTD that is representative of the aircraft category, class, and type if appropriate. Currently, the FAA approves the use of ATDs for private pilot, commercial pilot, and airline transport pilot certification through the issuance of LOAs under the Administrator's authority in § 61.4(c). The FAA will consider this comment concerning specific regulatory credit for ATDs to meet the requirements for pilot certificates and may address it in other rulemakings as appropriate.

One commenter asserted that current regulations regarding the use of ATDs for instrument proficiency checks under 14 CFR 61.57 is confusing. The commenter noted that § 61.57(d)(1)(i) specifies that the instrument proficiency check must be conducted in an aircraft while the Instrument Practical Test Standard specifies that both FSTDs or AATDs may be used for part or all of the instrument proficiency check. The commenter recommended that the regulations be clarified to correspond to the practical test standard.

FAA Response: This comment is outside the scope of the proposed rule. The FAA notes, however, that § 61.57(d)(1)(ii) provides an allowance for use of an FSTD that is representative of the aircraft category when conducting the instrument proficiency check. The FAA will consider this comment concerning the use of an ATD for the instrument proficiency check and the reference in the Instrument Practical Test that allows its use and will address it in other rulemakings as appropriate.

One commenter requested a variety of changes to § 61.57(c) regarding instrument experience and recency for pilots in command. The commenter highlighted differences between current requirements for completing instrument experience using an ATD to maintain instrument experience (§ 61.57(c)(3)); completing instrument recency experience using a combination of an aircraft and a full flight simulator, FTD, and ATD (§ 61.57(c)(4)); and completing instrument experience using a combination of a flight simulator or FTD, and an ATD (§ 61.57(c)(5)).

FAA Response: These comments are beyond the scope of this rulemaking. The FAA will consider these comments and may address them in other rulemakings as appropriate.

Finally, one commenter recommended changes to permit ground instructors to use ATDs to train their students.

FAA Response: The FAA allows ground instructors certain privileges. This includes training for aeronautical knowledge typically in a classroom environment and authorizing students for knowledge tests. While a ground instructor may use an ATD to illustrate ground training concepts, such training may not be logged to meet the aeronautical experience requirements for certificates and ratings. Providing flight training—or training in FSTDs or ATDs that can substitute for some of the required flight training—is a privilege reserved for flight instructors who have been evaluated during a practical test on the ability to provide flight training. Expanding this privilege to ground instructors is beyond the scope of this rulemaking.

4. Comments Opposing the Proposed Provisions

Three commenters opposed the proposed provisions.

One commenter, who identified himself as a flight instructor, believed that new instrument pilots need the stress, noise, and feeling of the real airplane when forming their habits and acquiring their skills, not the quiet, controlled, sterile atmosphere of a simulator. While the commenter supported the use of simulators later, he did not believe they are appropriate for new pilots.

FAA Response: The FAA somewhat disagrees with this commenter's general statement that pilots ''. . . need the stress and noise and feeling of the real item when forming their habits and acquiring their skills, not the quiet controlled sterile atmosphere of a SIM.'' The FAA contends that training in an ATD allows reduction in unnecessary distractions during initial training and permits focus on the important fundamental instrument skills and tasks necessary for safe and controlled instrument flight. This includes practicing emergency procedures and other maneuvers that cannot be safely accomplished in an aircraft. Practice in an FSTD or ATD until a pilot performs a particular segment of a procedure or action correctly, before attempting to do the same complex tasks in an aircraft, is an acceptable and desirable practice.

The FAA also contends that because a significant portion of the instrument time must be accomplished in an aircraft, the stress and noise experience and the feeling for the real environment discussed by the commenter will be provided during that time. Additionally, the FAA notes that § 61.65(d)(2)(i) (airplane) and § 61.65(e)(2)(i) (helicopter) currently require that three hours of training must be accomplished in an aircraft within two months of the practical test. The required instrument training on cross country procedures under instrument flight rules, including a flight of 250 nautical miles with at least three different instrument approaches and an instrument approach at each airport, must also be accomplished in an aircraft.

The FAA believes that training in FSTDs and ATDs, when used in conjunction with training in an aircraft, teach an instrument student to trust the appropriate sense, vision, in order to successfully operate an aircraft in low visibility conditions. Training in an ATD reinforces this necessary skill. Any reliance on ''sounds or feel'' may ultimately lead to loss of control when operating an aircraft in instrument meteorological conditions (IMC). Because ignoring the postural senses involves relying on visual clues, the ATD provides an excellent platform for a pilot to develop this portion of his or her instrument flying skills. A person must use his or her vision and focus on the flight instruments to successfully operate an aircraft, FSTD, or ATD in IMC conditions. The FAA recognizes that training devices do not require motion in order to be approved as an ATD; thus, these devices are limited in that they cannot completely train the pilot to ignore outside sensory perceptions. However, the FAA finds that a pilot can develop this ability during the aeronautical experience that an applicant for an instrument rating must obtain in an aircraft.

Another commenter, who also identified himself as a flight instructor, believed that FTDs and simulators do a good job at pretending to be an airplane in terms of learning procedures, but

they are not an airplane. The commenter believed that an ATD cannot give the true feeling of transitioning from visual meteorological conditions (VMC) to IMC, especially while climbing or turning. The commenter asserted that unless a provision is added to the rule to require the student to have more flight training in IMC conditions (the commenter recommended 5 hours), adding 10 hours of ATD time will only make the instrument pilots of the future less capable of flying in IMC.

FAA Response: The FAA agrees with the commenter that these trainers (ATDs) do a great job for learning procedures, but disagrees that ATDs cannot adequately provide for simulated transitions from VMC to IMC. Very often a pilot does not ''feel'' anything in an aircraft during these transitions. The FAA has evaluated hundreds of ATD visual systems and has found them to have adequate fidelity and capabilities, as required in AC 61–136A, to simulate visibility transition scenarios. In fact, many of the FAA approved visual systems provide for numerous scenarios including flying through multiple layers of clouds and varying visibility conditions. This commenter fails to provide an adequate explanation to support his or her position. Additionally, the commenter's discussion of FFSs, FTDs and PCATDs is outside the scope of this ATD rulemaking.

The third commenter addressed specific comments relating to a particular ATD. The commenter referenced Redbird ATDs, and asserted that:

> [T]heir panels are limiting in the sense that switches are not the same in the simulator as it is [sic] in the airplane. . . . The Redbird simulator does not provide a volume knob for either the COM or NAV which contains the ID mode. This is a required step in order to properly identify a VOR station. . . . The standby instruments is graphically depicted but the position of these instruments does not reflect the real location of where these instruments are installed.[28]

The commenter also expressed concern regarding updated databases to these training devices. The commenter believed that any ATD should be required to have the latest navigation database running on the ATD.

FAA response: The FAA notes that the commenter's discussion is concentrated on the dislike of the functionality of the Redbird trainer, rather than the ATD allowances for the proposed rule. The FAA agrees, however, that ATDs (the FAA assumes that the commenter is discussing a particular Redbird AATD based on the content of his initial statements) are not identical to the actual aircraft. The FAA emphasizes that, assuming the ATD in question received a LOA from the FAA, it met or exceeded the minimum fidelity and capability requirements specified for such devices in AC 61–136A. ATD fidelity requirements do not require that ATDs be exactly like that of the aircraft. The FAA notes that the Redbird Flight Simulations ATDs the FAA has approved through LOA do provide for the ability to update the database to reflect current instrument approach procedures. Appendix 2 of the AC states: The ATD must have at least a navigational area database that is local to the training facility to allow reinforcement of procedures learned during actual flight in that area. All navigational data must be based on procedures as published per 14 CFR part 97 (STANDARD INSTRUMENT PROCEDURES). The FAA has evaluated many of the Redbird training devices and finds that they meet the standards in AC 61–136A for ATD approval. If one were to prefer greater fidelity or more exacting duplication of certain aircraft configurations, then the FAA would suggest the use of a higher fidelity FAA approved training device such as an FTD or FFS. However, the FAA standards set forth in AC 61–136A are appropriate to training instrument procedures as described in Appendix 4, Training Content and Logging Provisions. This describes what instrument tasks can be successfully taught in ATDs.

5. Comments Opposing the Process

Two commenters expressed strong objections to the path the FAA took regarding this rulemaking. They objected to the withdrawal of the direct final rule, and believed that the adverse comments the FAA received during the comment period for the direct final rule should not have caused the agency to withdraw the rulemaking. They also believed the FAA should have acted more quickly once the original discrepancy between the regulations and policy was identified.

FAA Response: Part 11 of title 14 of the Code of Federal Regulations mandates the process and responsibilities associated with rulemaking. The FAA is required to follow those requirements even if viewed as unnecessary or inconvenient by a segment of the public. The Administrative Procedure Act requires the FAA to provide the public an opportunity to comment on proposed rulemakings, allowing the public to influence or suggest changes to those proposals. The FAA is committed to regulate fairly, promote safety, and works diligently within the confines of the rulemaking process.

B. View-Limiting Device

The FAA proposed to revise § 61.65(i)(4) to eliminate the requirement that pilots accomplishing instrument time in an ATD wear a view-limiting device. The FAA emphasizes, however, that a pilot—whether in an aircraft, FFS, FTD, or ATD—may log instrument time only when the pilot is operating solely by reference to the instruments under actual or simulated conditions. If a pilot is using an ATD and the device is providing visual references upon which the pilot is relying, this would not constitute instrument time under § 61.51(g).

Comments received: The FAA received six comments from SAFE, NAFI, and four individuals, supporting the elimination of the requirement that pilots accomplishing instrument time in an ATD wear a view-limiting device. SAFE explained its support for removal of the provision, noting that a benefit of using ATDs is simulation of the cockpit environment. SAFE asserted that that benefit is lost when the student is required to wear such a device. SAFE asserted that most students quickly become so immersed in the ATD experience that there is no need for a view-limiting device to further focus them on the instrument panel. All other commenters provided general support and did not explain or further justify their support for removal of this requirement.

FAA response: As the FAA stated when discussing the support it received for removing this requirement in the direct final rule, the FAA agrees that it is unnecessary for a student to wear a view-limiting device when using an ATD. The FAA finds that this requirement is not necessary because ATDs do not afford relevant outside references. Therefore, the FAA is revising 14 CFR 61.65(i)(4) to eliminate the requirement that pilots accomplishing instrument time in an ATD wear a view-limiting device.

C. Conforming Amendments and Nomenclature Change

While considering these changes, the FAA became aware that other appendices in part 141 reference § 141.41(a) when discussing FFS, and § 141.41(b) when discussing FTDs and ATDs. As this rule consolidates requirements related to FFS and FTDs into § 141.41(a), and adds new paragraph (b) related to ATDs, the FAA

[28] Anonymous, Docket No. FAA–2015–1846–0031.

is correcting cross-references in appendices C, D, E, F, G, J, K, and M.

Further, while considering these regulatory changes, the FAA noted that the nomenclature regarding flight simulators has changed. The definition as found in § 1.1 references a ''full flight simulator'' whereas the regulations often use the older nomenclature ''flight simulator.'' Therefore, in the sections the FAA has determined need to be revised as part of the final rule, the FAA is removing the words ''flight simulator'' wherever they appear and replacing them with the words ''full flight simulator.''

VI. Advisory Circulars and Other Guidance Materials

To further implement this rule, the FAA is revising the following FAA Order: FAA Order 8900.1, Flight Standards Information Management System, Volume 11, Chapter 10, Section 1, (Basic and Advanced Aviation Training Device) Approval and Authorized Use under 14 CFR parts 61 and 141.

VII. Regulatory Notices and Analyses

A. Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354), as codified in 5 U.S.C. 603 *et seq.,* requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39), as amended, 19 U.S.C. Chapter 13, prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4), as codified in 2 U.S.C. Chapter 25, requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this final rule.

In conducting these analyses, FAA has determined that this rule: (1) Has benefits that justify its costs; (2) is not an economically ''significant regulatory action'' as defined in section 3(f) of Executive Order 12866; (3) is not ''significant'' as defined in DOT's Regulatory Policies and Procedures; (4) will not have a significant economic impact on a substantial number of small entities; (5) will not create unnecessary obstacles to the foreign commerce of the United States; and (6) will not impose an unfunded mandate on State, local, or tribal governments, or on the private sector by exceeding the threshold identified above. These analyses are summarized below.

Department of Transportation DOT Order 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order permits that a statement to that effect and the basis for it be included in the preamble if a full regulatory evaluation of the costs and benefits is not prepared. Such a determination has been made for this final rule. The reasoning for this determination follows.

The provisions included in this rule are either relieving or voluntary. The elimination of the requirement to use a view-limiting device is a relieving provision. The other two provisions are voluntary and cost relieving—additional ATD credit for instrument time for an instrument rating and additional ATD credit for approved instrument courses, if acted upon, is less expensive than flight training time. The FAA made the same cost-benefit determination as part of the direct final rule (79 FR 71634, Dec. 3, 2014) and on this part of the notice of proposed rulemaking (80 FR 34338, Jun. 16, 2015) and received no comments.

Two commenters, both of whom identified themselves as private pilots working toward their instrument ratings, discussed the potential for cost relief provided by the proposed rule. Both commenters estimated that time in an approved simulator with an instructor costs about $100 per hour, while dual time in an instrument flight rules-certified aircraft is $200 per hour or more. These commenters asserted that adding an extra 10 hours of simulator time reduces $1,000 from the overall training cost.

Persons who use the new provisions will do so only if the benefit they will accrue from their use exceeds the costs they might incur to comply. Given the hundreds of LOAs issued, industry's high usage of ATDs, and SAFE's, AOPA's, and NAFI's endorsements of ATDs, the change in requirements is likely to be relieving. Benefits will exceed the costs of a voluntary rule if just one person voluntarily complies.

Since this rule will offer a lower cost alternative, will provide regulatory relief for the use of view-limiting devices, and will allow greater voluntary use of ATDs, the expected outcome will be cost relieving to minimal impact with positive net benefits.

B. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.'' The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

Most of the parties affected by this rule will be small businesses such as flight instructors, aviation schools, and fixed base operators. The general lack of publicly available financial information from these small businesses precludes a financial analysis of these small businesses. While there is likely a substantial number of small entities affected, the provisions of this rule are either relieving (directly provides cost relief) or voluntary (provides benefits or costs only if a person voluntarily chooses to use the rule provision). Thus,

the FAA determines that this rule will not have a significant economic impact on a substantial number of small entities. The FAA made the same determination as part of the direct final rule (79 FR 71634, Dec. 3, 2014) and as part of the notice of proposed rulemaking (80 FR 34338, Jun. 16, 2015) and, in both cases, we requested, but did not receive, any comments.

If an agency determines that a rulemaking will not result in a significant economic impact on a substantial number of small entities, the head of the agency may so certify under section 605(b) of the RFA. Therefore, as provided in section 605(b), the head of the FAA certifies that this rulemaking will not result in 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 effect of this rule and determined that it will have only a domestic impact and therefore will not create unnecessary obstacles to the foreign commerce of the United States.

D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of $100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a ''significant regulatory action.'' The FAA currently uses an inflation-adjusted value of $155.0 million in lieu of $100 million.

This rule does not contain such a mandate. Therefore, the requirements of Title II of the Act do not apply.

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 rule.

F. International Compatibility and Cooperation

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 reviewed the corresponding ICAO Standards and Recommended Practices and has identified no differences with 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 in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 5–6.6 and involves no extraordinary circumstances.

VII. Executive Order Determinations

A. Executive Order 13132, Federalism

The FAA has analyzed this rule under the principles and criteria of Executive Order 13132, Federalism. The agency 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, would not have Federalism implications.

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

The FAA analyzed this rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it will not be a ''significant energy action'' under the executive order and will not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

C. Executive Order 13609, Promoting International Regulatory Cooperation

Executive Order 13609, Promoting International Regulatory Cooperation, (77 FR 26413, May 4, 2012) 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 would have no effect on international regulatory cooperation.

VIII. Additional Information

A. Availability of Rulemaking Documents

An electronic copy of rulemaking documents may be obtained from the Internet by—

- Searching the Federal eRulemaking Portal (*http://www.regulations.gov*);
- Visiting the FAA's Regulations and Policies Web page at *http://www.faa.gov/regulations_policies,* or
- Accessing the Government Publishing Office's Web page at *http://www.fdsys.gov.*

Copies may also be obtained by sending a request (identified by docket or amendment number of the rule) to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9677.

All documents the FAA considered in developing this rule, including economic analyses and technical reports, may be accessed from the Internet through the Federal eRulemaking Portal referenced previously.

B. Comments Submitted to the Docket

Comments received may be viewed by going to *http://www.regulations.gov* and following the online instructions to search the docket number for this action. Anyone is able to search the electronic form of all comments received into any of the FAA's dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.).

C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) requires 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 *http://www.faa.gov/regulations_policies/rulemaking/sbre_act/.*

List of Subjects

14 CFR Part 61

Aircraft, Airmen, Aviation safety, Teachers.

14 CFR Part 141

Airmen, Educational facilities, Reporting and recordkeeping requirements, Schools.

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 continues 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.

■ 2. Amend § 61.65 as follows:
■ a. In paragraphs (a)(5), (a)(8)(ii), (c) introductory text, and (h), remove the words ''flight simulator'' and add in their place the words ''full flight simulator''; and,
■ b. Revise paragraph (i) and add paragraph (j).

The revision and addition read as follows:

§ 61.65 Instrument rating requirements.

* * * * *

(i) *Use of an aviation training device.* A maximum of 10 hours of instrument time received in a basic aviation training device or a maximum of 20 hours of instrument time received in an advanced aviation training device may be credited for the instrument time requirements of this section if—

(1) The device is approved and authorized by the FAA;

(2) An authorized instructor provides the instrument time in the device; and

(3) The FAA approved the instrument training and instrument tasks performed in the device.

(j) Except as provided in paragraph (h)(1) of this section, a person may not credit more than 20 total hours of instrument time in a full flight simulator, flight training device, aviation training device, or a combination towards the instrument time requirements of this section.

PART 141—PILOT SCHOOLS

■ 3. The authority citation for part 141 continues to read as follows:

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

■ 4. Revise § 141.41 to read as follows:

§ 141.41 Full flight simulators, flight training devices, aviation training devices, and training aids.

An applicant for a pilot school certificate or a provisional pilot school certificate must show that its full flight simulators, flight training devices, aviation training devices, training aids, and equipment meet the following requirements:

(a) *Full flight simulators and flight training devices.* Each full flight simulator and flight training device used to obtain flight training credit in an approved pilot training course curriculum must be:

(1) Qualified under part 60 of this chapter, or a previously qualified device, as permitted in accordance with § 60.17 of this chapter; and

(2) Approved by the Administrator for the tasks and maneuvers.

(b) *Aviation training devices.* Each basic or advanced aviation training device used to obtain flight training credit in an approved pilot training course curriculum must be evaluated, qualified, and approved by the Administrator.

(c) *Training aids and equipment.* Each training aid, including any audiovisual aid, projector, mockup, chart, or aircraft component listed in the approved training course outline, must be accurate and relevant to the course for which it is used.

■ 5. In appendix B to part 141, revise paragraph (c) in section 4 to read as follows:

Appendix B to Part 141—Private Pilot Certification Course

* * * * *

4. *Flight training.* * * *

(c) For use of full flight simulators or flight training devices:

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and the training is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 20 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of 15 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in full flight simulators or flight training devices described in paragraphs (c)(2) and (3) of this section, if used in combination, may be credited for a maximum of 20 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c)(3) of this section.

* * * * *

■ 6. In appendix C to part 141, revise paragraph (b) in section 4 to read as follows:

Appendix C to Part 141—Instrument Rating Course

* * * * *

4. *Flight training.* * * *

(b) For the use of full flight simulators, flight training devices, or aviation training devices—

(1) The course may include training in a full flight simulator, flight training device, or aviation training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and the training is given by an authorized instructor.

(2) Credit for training in a full flight simulator that meets the requirements of § 141.41(a) cannot exceed 50 percent of the total flight training hour requirements of the course or of this section, whichever is less.

(3) Credit for training in a flight training device that meets the requirements of § 141.41(a), an advanced aviation training device that meets the requirements of § 141.41(b), or a combination of these devices cannot exceed 40 percent of the total flight training hour requirements of the course or of this section, whichever is less. Credit for training in a basic aviation training device that meets the requirements of § 141.41(b) cannot exceed 25 percent of the total training hour requirements permitted under this paragraph.

(4) Credit for training in full flight simulators, flight training devices, and aviation training devices if used in

combination, cannot exceed 50 percent of the total flight training hour requirements of the course or of this section, whichever is less. However, credit for training in a flight training device or aviation training device cannot exceed the limitation provided for in paragraph (b)(3) of this section.

* * * * *

■ 7. In appendix D to part 141, revise paragraph (c) in section 4 to read as follows:

Appendix D to Part 141—Commercial Pilot Certification Course

* * * * *

4. *Flight training.* * * *

(c) For the use of full flight simulators or flight training devices:

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of 20 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in the flight training devices described in paragraphs (c)(2) and (3) of this section, if used in combination, may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c)(3) of this section.

* * * * *

■ 8. In appendix E to part 141, revise paragraph (b) in section 4 to read as follows:

Appendix E to Part 141—Airline Transport Pilot Certification Course

* * * * *

4. *Flight training.* * * *

(b) For the use of full flight simulators or flight training devices—

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and the training is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 50 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of 25 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in full flight simulators or flight training devices described in paragraphs (b)(2) and (3) of this section, if used in combination, may be credited for a maximum of 50 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (b)(3) of this section.

* * * * *

■ 9. In appendix F to part 141, revise paragraph (b) in section 4 to read as follows:

Appendix F to Part 141—Flight Instructor Certification Course

* * * * *

4. *Flight training.* * * *

(b) For the use of flight simulators or flight training devices:

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and the training is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a), may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a), may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in full flight simulators or flight training devices described in paragraphs (b)(2) and (3) of this section, if used in combination, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (b)(3) of this section.

* * * * *

■ 10. In appendix G to part 141, revise paragraph (b) in section 4 to read as follows:

Appendix G to Part 141—Flight Instructor Instrument (For an Airplane, Helicopter, or Powered-Lift Instrument Instructor Rating, as Appropriate) Certification Course

* * * * *

4. *Flight training.* * * *

(b) For the use of full flight simulators or flight training devices:

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved for, meets requirements of this paragraph, and the training is given by an instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a), may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a), may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in full flight simulators or flight training devices described in paragraphs (b)(2) and (3) of this section, if used in combination, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(b) cannot exceed the limitation provided for in paragraph (b)(3) of this section.

* * * * *

■ 11. In appendix J to part 141, revise paragraph (b) in section 4 to read as follows:

Appendix J to Part 141—Aircraft Type Rating Course, For Other Than an Airline Transport Pilot Certificate

* * * * *

4. *Flight training.* * * *

(b) For the use of full flight simulators or flight training devices:

(1) The course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets requirements of this

paragraph, and the training is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a), may be credited for a maximum of 50 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a), may be credited for a maximum of 25 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in the full flight simulators or flight training devices described in paragraphs (b)(2) and (3) of this section, if used in combination, may be credited for a maximum of 50 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (b)(3) of this section.

* * * * *

■ 12. In appendix K to part 141, revise section 4 to read as follows:

Appendix K to Part 141—Special Preparation Courses

* * * * *

4. *Use of full flight simulators or flight training devices.* (a) The approved special preparation course may include training in a full flight simulator or flight training device, provided it is representative of the aircraft for which the course is approved, meets requirements of this paragraph, and the training is given by an authorized instructor.

(b) Except for the airline transport pilot certification program in section 13 of this appendix, training in a full flight simulator that meets the requirements of § 141.41(a), may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(c) Except for the airline transport pilot certification program in section 13 of this appendix, training in a flight training device that meets the requirements of § 141.41(a), may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(d) Training in the full flight simulators or flight training devices described in paragraphs (b) and (c) of this section, if used in combination, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c) of this section.

* * * * *

■ 13. In appendix M to part 141, revise paragraph (c) of section 4 to read as follows:

Appendix M to Part 141—Combined Private Pilot Certification and Instrument Rating Course

* * * * *

4. *Flight training.*

* * * * *

(c) For use of full flight simulators or flight training devices:

(1) The course may include training in a combination of full flight simulators, flight training devices, and aviation training devices, provided it is representative of the aircraft for which the course is approved, meets the requirements of this section, and the training is given by an authorized instructor.

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 35 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) or an aviation training device that meets the requirements of § 141.41(b) may be credited for a maximum of 25 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a combination of flight simulators, flight training devices, or aviation training devices, described in paragraphs (c)(2) and (3) of this section, may be credited for a maximum of 35 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device and aviation training device, that meets the requirements of § 141.41(b), cannot exceed the limitation provided for in paragraph (c)(3) of this section.

* * * * *

Issued in Washington, DC, under the authority of 49 U.S.C. 106(f), 44701(a)(5), and 44703(a), on April 4, 2016.

Michael P. Huerta,

Administrator.

[FR Doc. 2016–08388 Filed 4–8–16; 11:15 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 100

[Docket Number USCG–2015–1126]

RIN 1625–AA08

Special Local Regulation; Chesapeake Bay, Between Sandy Point and Kent Island, MD

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing special local regulations for certain waters of the Chesapeake Bay. This action is necessary to provide for the safety of life on these navigable waters located between Sandy Point, Anne Arundel County, MD and Kent Island, Queen Anne's County, MD, during a paddling event on May 14, 2016. This rulemaking will prohibit persons and vessels from being in the regulated area unless authorized by the Captain of the Port Baltimore or Coast Guard Patrol Commander.

DATES: This rule is effective from 7:30 a.m. on May 14, 2016 through 12:30 p.m. on May 15, 2016.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov,* type USCG–2015–1126 in the ''SEARCH'' box and click ''SEARCH.'' Click on Open Docket Folder on the line associated with this rule.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or email Mr. Ronald Houck, U.S. Coast Guard Sector Baltimore, MD; telephone 410–576–2674, email *Ronald.L.Houck@uscg.mil.*

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
COTP Captain of the Port
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
§ Section
U.S.C. United States Code