

July 7, 2021

Submitted to: http://www.regulations.gov

U.S. Department of Transportation Docket Operations West Building Ground Floor Room W12-140 1200 New Jersey Avenue, SE Washington, DC 20590-0001

RE: Petition for Exemption from Title 14 Code of Federal Regulations (CFR)¹ § 65.77

To Whom It May Concern:

This petition for exemption is filed pursuant to part 11.²

Choose Aerospace, a non-profit corporation with a mission to promote careers in aviation maintenance, respectfully submits this petition to allow students completing the Choose Aerospace general curriculum to take the FAA general written knowledge test.

In partnership with the Aviation Technician Education Council (ATEC), Clemson University, and a host of technical experts and industry representatives, Choose Aerospace is creating general aviation maintenance curriculum for adoption in educational settings. If granted, the exemption would allow students completing the Choose Aerospace curriculum to take the aviation mechanic general written test, putting graduates on a path to certification either through direct employment or transfer credit opportunities at a network of part 147 aviation maintenance technical schools.

The early testing opportunity would further incentivize educational programs to adopt aviation technical curriculum, increasing aviation career awareness and building new workforce pipelines into long-term aviation technical careers.

¹ All regulatory references are to 14 CFR unless otherwise indicated.

² See §§ <u>11.61(b)</u>, <u>11.63</u> and <u>11.81</u>.

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Specific Section from which Exemption is Sought³

On behalf of the student taking the Choose Aerospace curriculum, Petitioner requests exemption from the following regulation (specifically, the provisions emphasized in italics):

§ 65.77 Experience requirements.

Each applicant for a mechanic certificate or rating must present either an appropriate graduation certificate or certificate of completion *from a certificated aviation maintenance technician school* or documentary evidence, satisfactory to the Administrator, of—

(a) At least 18 months of practical experience with the procedures, practices, materials, tools, machine tools, and equipment generally used in constructing, maintaining, or altering airframes, or powerplants appropriate to the rating sought; or

(b) At least 30 months of practical experience concurrently performing the duties appropriate to both the airframe and powerplant ratings.

Petitioner proposes that, in lieu of a graduation certificate from a certificated aviation maintenance school, a student be allowed to present a certificate evidencing completion of the Choose Aerospace curriculum, such that the student could sit for the general written knowledge test as provided for in § 65.75:

§ 65.75 Knowledge requirements.

(a) Each applicant for a mechanic certificate or rating must, after meeting the applicable experience requirements of § 65.77, pass a written test covering the construction and maintenance of aircraft appropriate to the rating he seeks, the regulations in this subpart, and the applicable provisions of parts 43 and 91 of this chapter. The basic principles covering the installation and maintenance of propellers are included in the powerplant test.

(b) The applicant must pass each section of the test before applying for the oral and practical tests prescribed by § 65.79. A report of the written test is sent to the applicant.

³ See § <u>11.81(b).</u>

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Reason and Extent of Relief Sought⁴

Under the current regulatory framework, non-certificated aviation maintenance programs cannot—unlike their pilot program counterparts—refer their students to an FAA-approved testing center to take the general written knowledge test.

The opportunities made available through early written testing is apparent in pilot pathway programs, where individuals can and do qualify to take the written private pilot test independent of a part 141 pilot training school. The inconsistency puts those on a technical career track at a disadvantage over their pilot counterparts, where trainees can realize certain "successes" earlier in their training cycle.

Indeed, curriculum available through the Aircraft Owners and Pilots Association (AOPA) encourages high schools to include the FAA written test in their curriculum plans, with the generally adopted consensus that individuals completing a portion of required testing earlier in the training cycle are more likely to ultimately become certified, whatever the path taken.

Through this petition, Choose Aerospace is asking that similar consideration and opportunities available to would-be pilots, be provided to individuals choosing aviation technical careers.

Why Granting the Relief is in the Public Interest⁵

The petition offers a solution to a looming aviation technical workforce crisis that will have devastating consequences on the aviation industry and the flying public if it comes to fruition.

ATEC estimates that new mechanic certifications will need to increase by 37% to meet the projected 20-year demand.⁶ And yet, the FAA certificated fewer mechanics last year than it did a decade ago, and the number of newly-certificated mechanics only increased an average of 2% a year over the last four years.⁷ Expanding and developing workforce pipeline programs is the single biggest opportunity we have to fill the nearly 16,000 open seats at part 147 aviation

⁴ See § <u>11.81(c).</u>

⁵ See § <u>11.81(d).</u>

⁶ The 2019-2020 ATEC Pipeline Report is available at <u>https://www.atec-amt.org/pipeline-report.html</u>. In it the council forecasts that industry will need to increase its annual output of new mechanics by 37% (relative to 2019) to meet the projected 20-year demand.

⁷ Based on a comparison of FAA civil airman statistics published annually and available at <u>https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics/</u>.

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maintenance technical schools⁸ (which create 60% of all new mechanics) and ultimately meet industry's rising demand.

The ability for students to take the general written test—independent of an AMTS or relevant work experience—would transform workforce development programs into true career pathways and help fill empty AMTS seats in several ways.

First, while an AMTS will assess each potential student to determine how much credit, if any, the individual would be provided upon enrollment, a knowledge test report would provide additional, standardized evidence of the students' knowledge in general aviation concepts. Having passed the FAA general written knowledge test would therefore support and encourage an AMTS to offer credit, a large incentive for high school pipeline programs, because the school would have independent verification that the individual has the knowledge as set forth in the general section of the airman certification standards.

Second, career technical programs are more likely to adopt curriculum when graduates leave with some sort of "credential"—such as documentation evidencing successful passage of an FAA knowledge test. The ability to take the general, written test at the completion of the Choose Aerospace curriculum—which will continually align with the ACS under the guidance of an industry advisory committee—will create new funding opportunities for schools that adopt the curriculum, aiding wide-spread adoption of aviation technical programs.

These incentives, created through the opportunity to test, would support curriculum adoption in communities that do not currently offer aviation pathways options, and help create new sources of talent from underserved and underrepresented populations. The public would ultimately benefit given graduating students would be put on an immediate path to certification—either through enrollment at an AMTS or through direct employment—with very little investment required on the part of the community.

Choose Aerospace recognizes that if the exemption is approved, it bears responsibility to ensure the content meets certain quality standards and to communicate certification testing deadlines to students. It therefore proposes that the exemption be subject to conditions and limitations proposed in Attachment 1.

⁸ Based on the summation of maximum authorized students compared to current enrollments as set forth in the FAA Mechanic School data download, available at <u>https://av-</u> info.faa.gov/dd sublevel.asp?Folder=%5CMechanicSchools.

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Why Granting the Relief does not Adversely Affect Safety⁹

The Choose Aerospace curriculum would cover all general elements of the mechanic certification standards and would therefore impart the requisite knowledge and skill needed to successfully pass the FAA general portion of the written test. The agency's mission of safety in flight would be furthered through wide-spread availability of world class curriculum. Graduating students would still be required to continue their education at a part 147 school or obtain the 18-30 months of experience before seeking full mechanic certification, so there would be no compromise in terms of aviation safety.

Further, the quality of the curriculum would be assessed as it is for aviation maintenance technical schools. A successful mechanic certificate applicant must have the knowledge and skill as set forth in the certification standard. Passage of the FAA general written test would therefore serve as a quality check for the curriculum, ensuring the minimum knowledge and skill levels are held by any individual holding an FAA mechanic certificate.

Summary to be Published in the Federal Register¹⁰

Choose Aerospace, Inc. petitioned for an exemption from § 65.77 to allow students to take the mechanic general written examinations after completing the corresponding portion of its aviation maintenance curriculum.

Thank you in advance for considering this request,

Sincerely,

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Crystal Maguire Executive Director

⁹ See § <u>11.81(e).</u>

¹⁰ See § <u>11.81(f).</u>

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Attachment 1 Proposed Conditions and Limitations for FAA Exemption

- 1. Choose Aerospace will ensure that the Choose Aerospace curriculum continually aligns with general portion of the mechanic airman certification standards, so that content covers the knowledge assessed in the FAA general written test.
- 2. Choose Aerospace shall provide authenticated documentation to each student that successfully completes the Choose Aerospace curriculum, indicating the student's date of completion and the modules completed, and that the student is therefore eligible to take the FAA general written test.
- 3. Choose Aerospace will clearly communicate to students enrolled in the program, the timeline imposed by § 65.75(a), requiring the test taker to obtain the necessary experience and complete the written, oral, and practical portions for at least one rating within 24 months of taking the general written test.
- 4. Choose Aerospace will allow FAA official(s) to access the Choose Aerospace curriculum platform for purposes of auditing and assessing the content to confirm alignment with airman certification standards.