Republic Airways

April 14, 2022

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

Subject: *Petition of Republic Airways Inc. for Exemption from 14 C.F.R. § 61.160(a)*

Dear Sir or Madam:

Pursuant to 14 C.F.R. Part 11, Republic Airways Inc. ("Republic") hereby requests an exemption from 14 C.F.R. § 61.160(a). If granted, the requested relief would enable Republic to implement the Republic Restricted Air Transport Pilot (R-ATP) Program. The Republic R-ATP Program aligns with existing R-ATP regulations, meets the corresponding requirements of those criteria, and is designed to resemble and provide the benefits and rigorous curriculum and structure of the § 61.160(a) military-based pathways training, albeit for closed-loop civilian pilot training for Part 121 operations.

In support of this Petition, Republic provides below the information required by 14 C.F.R. § 11.81 and additional information about the Republic R-ATP Program. As detailed below, this narrowly tailored exemption would be in the public interest, would have no adverse impact on safety, and will provide a higher level of safety to § 61.160(a).

Republic respectfully requests expedited action on this Petition.

Respectfully submitted,

Paul Kinstedt
Chief Operating Officer
Republic Airways Inc.

Republic Airways Restricted Air Transport Pilot Program Introduction

Brief Overview:

The Republic Airways Restricted Air Transport Pilot (R-ATP) Program ("Republic R-ATP Program" or "Program") is a part 121 air carrier-guided pilot training program designed specifically to meet the qualifications of obtaining a Restricted Air Transport Pilot (R-ATP) certificate for part 121 operations.

The Republic R-ATP Program aligns with existing R-ATP regulations and meets the requirements of those criteria. This training path is designed to resemble the § 61.160(a) military-based pathway training, as applied to civilian pilot training for part 121 operations. Through its rigorous curriculum and structure, this Program will exceed the safety standards of the military R-ATP, as applied to a civilian pilot trained specifically for part 121 operations, thereby provide a higher level of safety to § 61.160(a).

This Petition for Exemption is submitted under Title 14, Chapter 1, Subchapter B, Part 11, following the guidelines of § 11.63 (a)(1) and § 11.81 (a) – (g).

Career Opportunities - Supporting Underserved Communities:

The Republic R-ATP Program is designed to make airline pilot career opportunities more accessible for qualified individuals from underrepresented groups who meet the selection criteria but may not have the financial means or academic support to pursue an aviation career path, while providing a higher level of safety to § 61.160(a). Republic is committed to supporting these aspiring aviators through financial and employment sponsorships, as well as rigorous part 121 air carrier-focused education and training.

To implement an air carrier-guided R-ATP pathway under the Republic R-ATP Program and provide exceptional opportunities for underrepresented groups, Republic seeks an exemption from § 61.160(a).

This exemption maintains the required hours allotment for a R-ATP. It also allows pilots who graduate from Leadership In Flight Training Academy's (LIFT) approved 14 CFR part 141 training program and who meet all the requirements outlined in this Program to apply for an airline transport pilot certificate with restrictive privileges, R-ATP.

Rigorous Selection:

As with the military R-ATP pathway, the Republic R-ATP Program has a rigorous selection and admissions process to ensure candidates are selected based on their aptitude to be a pilot. Once admitted to the Program, students follow a highly structured training curriculum where they train as a full-time employee. The Program includes pilot certification and training through

supervised flight hours and centers specifically on training them to become part 121 air carrier, transport category pilots. Within the Program, students will complete courses in Advanced Airline Academics, complete Command Experience, receive a Republic mentor, and complete Supplemental Advanced Aviation Training to help them better prepare for a career as an airline pilot.

To uphold the rigor of the training, students will be assessed and are required to pass multiple knowledge and skill validation gates throughout the Program life cycle. Failure to pass any gate will result in the student to be transitioned out of the Republic R-ATP Program and continue through the standard ATP pathway.

Closed Loop Data Program:

The Republic R-ATP Program is a closed-loop system operated within Republic and its wholly-owned subsidiary the LIFT Academy. As a closed-loop program, the pilot students are trained entirely within a highly structured, supervised environment that is specific to airline transport pilot requirements, including academic and all flight training hours. The entire training process is connected through performance data collection and analysis to ensure proficiency of each qualification standard is timely achieved.

Ownership of the closed-loop data structure gives Republic the ability to analyze Republic R-ATP training through its AQP, as well as student performance and program data at LIFT that is structured and developed in alignment with the Republic AQP, providing the ability to adjust and improve the training content as needed through data informed and data driven analysis.

This closed loop program of monitoring a pilot's initial flight training all the way through to meeting those requirements necessary to pursue opportunities as a pilot in part 121 operations is akin to that of a pilot who receives flight training through the military.

Pilots who complete the Republic R-ATP Program would be able to exercise their R-ATP privilege solely at Republic to ensure the rigorous environment and comparative data review standards outlined within the petition are met. This requirement would be removed once a pilot meets the unrestricted qualification, the same as other currently authorized programs.

Republic Airways

Table of Contents

Introduction……1

Table of Contents……3

1 Contact Information 5

1.1 § 11.81(a) Your name and mailing address and, if you wish, other contact information such as a fax number, telephone number, or e-mail address..... 5

2 Specific Section – Relief..... 5

2.1 § 11.81(b) The specific section or sections of 14 CFR from which you seek an exemption..... 5

2.2 Exemption Rationale..... 6

2.2.1 Exemption Rationale [Overview]..... 6

2.2.2 Precedence of Exemption [of Specific Section §61.160]..... 7

3 Extent of Relief Being Sought 8

3.1 § 11.81(c) The extent of relief you seek, and the reason you seek the relief..... 8

3.1.1 Republic R-ATP Program [extent of relief you seek]..... 8

3.1.2 Republic R-ATP Program creates an efficient, direct, and closed-loop path to becoming an airline pilot [reason you seek relief] 9

4 Public Benefit in Granting the Request 10

4.1 § 11.81(d) The reason why granting your request would be in the public interest; that is, how it would benefit the public as a whole 10

4.1.1 Increasing Diversity in the Aviation Industry..... 10

4.1.2 Program is replicable by other airlines 19

4.1.3 Meeting the industry's needs..... 19

4.1.4 Lowering impact on the Environment 20

5 Level of Safety Equal to - or Above - the Existing Rule 20

5.1 § 11.81(e) The reasons why granting your exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to that provided by the rule from which you seek the relief 20

5.1.1 Supplementary training elements that emphasize the importance of safety..... 20

5.1.2 Correlative data review with AQP data..... 39

6 Summary to Publish in the Federal Register..... 45

6.1 § 11.81(f) A summary we can publish in the Federal Register, stating: (1) The rule from which you seek the exemption; and (2) A brief description of the nature of the exemption you seek..... 45

7 Additional Information..... 45

7.1 § 11.81(g) Any additional information, views or arguments available to support your request45
7.2 Republic R-ATP Implementation Plan 45
7.2.1 Small validation groups 45
7.2.2 FAA oversight 46
7.3 Community Outreach Initiatives 47
7.4 Public industry documents 50
Air Carrier Training Aviation Rulemaking Committee (ACT ARC) Recommendation 16-8 50
First Officer Qualification Aviation Rulemaking Committee Report 50
8 Exercising the privileges of the exemption outside the US 50
8.1 § 11.81(h) If you want to exercise the privileges of your exemption outside the United States, the reason why you need to do so. 50

1 Contact Information

1.1 § 11.81(a) Your name and mailing address and, if you wish, other contact information such as a fax number, telephone number, or e-mail address

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2 Specific Section – Relief

2.1 § 11.81(b) The specific section or sections of 14 CFR from which you seek an exemption

14 CFR § 61.160(a) currently requires a person to be a current or former U.S. military pilot to apply for an airline transport pilot certificate with restrictive privileges.

> **14 CFR 61.160(a)**
>
> Except for a person who has been removed from flying status for lack of proficiency or because of a disciplinary action involving aircraft operations, a U.S. military pilot or former U.S. military pilot may apply for an airline transport pilot certificate with an airplane category multiengine class rating or an airline transport pilot certificate concurrently with a multiengine airplane type rating with a minimum of 750 hours of total time as a pilot if the pilot presents:
>
> 1) An official Form DD-214 (Certificate of Release or Discharge from Active Duty) indicating that the person was honourably discharged from the U.S. Armed Forces or an official U.S. Armed Forces record that shows the pilot is currently serving in the U.S. Armed Forces; and
> 2) An official U.S. Armed Forces record that shows the person graduated from a U.S. Armed Forces undergraduate pilot training school and received a rating qualification, as a military pilot.

Republic Airways ("Republic") is submitting this petition for exemption from 14 CFR § 61.160(a). The requested exemption would allow selected civilian pilots who complete the rigorous Republic R-ATP Program to apply under 14 CFR § 61.160(a) for an airline transport pilot certificate concurrently with a multiengine airplane type rating with a minimum of 750 hours of total flight time as a pilot.

2.2 Exemption Rationale

2.2.1 Exemption Rationale [Overview]

Current professional pilot pathways to reach an ATP are effective. However, they have also created barriers to individuals from underserved areas and underrepresented groups. Since the Airline Safety and FAA Extension Act, HR5900 that was introduced into law in August 2010, the industry recognized the need to pursue alternative pilot development pathways beyond the published aviation regulations. Since then, the FAA Air Carrier Training Aviation Rulemaking Committee (ACT-ARC) published numerous recommendations[1] through various ARC working groups to improve and develop pilot safety, including alternative methods to develop professional pilots for part 121 operations.

Recognizing an industry-wide need for additional pathways for aspiring pilots, particularly minorities and women to achieve an ATP, careful consideration has been made for this petition to be a reasonable exemption solution that benefits the public interest, improves safety, and complies with the intent of § 61.160(a).

Republic recognizes the need to improve Diversity, Equity and Inclusion (DEI) in our Industry. Creating aviation opportunities for a larger pool of qualified and motivated individuals is a must for the industry.

Public Law 111-216, signed into law in August of 2010, included numerous sections that outline requirements and changes intended to improve public air carrier safety. Among the changes is the expansion of required flight experience hours[2] from a minimum of 250 total hours to 1,500 total hours to be eligible to obtain an Airline Transport Pilot (ATP) certificate upon successful completion of the part 121 certificate holder's FAA approved qualification training. While this expansion of total flight hours is intended to increase experience, this requirement also introduced numerous logistical factors, affecting the career path for most aspiring pilots.

In addition, PL 111-216 also describes that the FAA Administrator may allow credit for flight hours[3]. This resulted in § 61.160 Aeronautical Experience – Airplane Category Restricted Privileges. Within § 61.160, aspiring pilots may choose to pursue several different restricted ATP pathways[4], depending on their career, education, and aviation experience. All restricted ATP pathways allow flight hours credit toward the 1,500-hour minimum until the pilot reaches 1,500 total experience hours.

To ensure that every pilot selected for the Republic R-ATP Program meets the safety standards, skills, and aviation competencies necessary to be successful throughout their entire training experience and throughout their career in part 121 operational service, Republic fervently supports the minimum hours requirements to achieve an ATP and seeks to enhance pilot safety through an exemption detailed below consistent with §61.160(a).

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[1] See: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs200/afs280/act_arc

[2] PL111-216 Sec. 217(c)

[3] PL111-216 Sec. 217(d)

[4] 14 CFR §61.160(a-d)

This exemption does not seek to reduce pilot experience hours beyond the published restricted privileges ATP pathway regulations.

2.2.2 Precedence of Exemption [of Specific Section §61.160]

This specific Republic petition for an alternative restricted ATP pathway is innovative, comprehensive, in the public interest, and provides at least an equivalent level of safety to current §61.160(a) however, the idea of flight credit hour towards an ATP is not new to the industry or the FAA. In September of 2010, the FAA asked the First Officer Qualification Aviation Rule Making Committee (FOQ ARC) to consider the provisions of the Public Law in developing its final recommendations. For example, among the numerous ARC recommendations, the ATP WG 16-8 recommendation[5] was submitted to the FAA as a creative alternative pathway to a R-ATP and outlined a proposed 'Enhanced Qualification Program' pathway.

Recommendation products submitted to the FAA by the ACT-ARC are published by the FAA on its Aviation Safety Offices webpage, titled Air Carrier Training Aviation Rulemaking Committee (ACT-ARC)[6]. Precedence for alternative pathway recommendations submitted to the FAA is highlighted in the ATP Working Group recommendation 16-8: Enhanced Qualification Program (EQP) Alternative Pathway to a R-ATP):

> The FOQ ARC submitted its recommendations report[7] to the FAA in September 2010. Based on the FOQ ARC recommendations, the FAA promulgated 14 CFR 61.160, which provides credit toward the aeronautical experience requirements for issuance of an R-ATP certificate to (1) current and former U.S. military pilots and (2) graduates of aviation degree programs at institutions of higher education that include a ground and flight training curriculum approved under 14 CFR part 141.
>
> In accordance with ACT ARC Initiative #29 and the ATP WG Terms of Reference, the ATP WG has been tasked to explore the creation of alternative pathway(s) to an R-ATP. These recommendations developed by the ATP WG outline such an alternative pathway to an R-ATP.

Specifically, 16-8 EQP outlines equivalency credit for each of the restricted ATP pathways, including the military pathway in §61.160(a).

> The EQP content is designed in part to affirm the comprehension of basic academic material that was previously taught to commercial, instrument, multiengine rated pilots. In addition, EQP academic material will cover advanced subjects required to safely exercise the privileges of an R-ATP, which no military flight training or aviation university program covers.

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[5] Air Carrier Training Aviation Rulemaking Committee (ACT ARC) - Recommendation 16-8: Enhanced Qualification Program

[6] See: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs200/afs280/act_arc

[7] FOQ.ARC.RR.20100928

> As previously acknowledged in § 61.160(a), an intensive and highly structured program, such as military pilot programs, receives additional credit for its value. The EQP provides more than just intensive academics; it also provides structure for critical components such as recency.

Similar to the ATP Working Group 16-8 alternative pathway recommendation of the Enhanced Qualification Program, the Republic R-ATP Program offers a structured, comprehensive, and advanced aviation academic training pathway by seeking exemption from § 61.160(a), which allows the certificate holder to maintain the published requirements of § 61.159, while following the regulatory guidance of criteria published under §61.160.

When the Final Rule on Pilot Certification and Qualification Requirements for Air Carrier Operations was published in July 2013, the FAA emphasized "the importance of an aviation curriculum in permitting a reduction of hours. It is the significance of aviation coursework above and beyond what is required for pilot certification that is the primary basis for permitting a reduction in flight hours." 78 Fed. Reg. 42324, 42352 (July 15, 2013). The Republic R-ATP Program is fully consistent with that commentary – the Republic R-ATP Program provides significant rigorous, substantive coursework above and beyond the pilot certification requirements, with regular testing and gating items. It also goes well beyond the coursework of basic flight academies, which the FAA commented "do not spend an abundance of time in aviation coursework, separate from the minimally required ground school, over a period of several years," in rejecting the idea of reduced flight hours for basic flight academies or pilots who complete ground and flight training at a part 141 pilot school. 78 Fed. Reg. at 42353. As detailed below, the Republic R-ATP Program much more resembles the military-based pathway training, for which the FAA did provide a reduced hours requirement in § 61.160(a).

3 Extent of Relief Being Sought

3.1 § 11.81(c) The extent of relief you seek, and the reason you seek the relief

3.1.1 Republic R-ATP Program [extent of relief you seek]

Republic seeks an exemption from § 61.160(a) to the extent necessary to allow pilots who graduate from Leadership In Flight Training Academy's ("LIFT") approved part 141 training program **and** meet all requirements outlined in the Republic R-ATP Program to apply for an airline transport pilot certificate with restrictive privileges (R-ATP).

The reason for this petition is to seek relief from the current § 61.160(a) rule and allow selected civilian pilot graduates who complete a closed-loop training program, similar to that experienced in the military, to be qualified for the applicable R-ATP 750-hour flight experience credit. If granted, pilots would be able to exercise this privilege solely at Republic to ensure the rigorous environment and comparative data review standards outlined within the petition are met. This requirement would be removed once a pilot meets all qualifications under §61.153.

This Program is designed to meet or exceed the safety of the military R-ATP. In addition, this Program will support aspiring aviators from underserved communities and diverse backgrounds to pursue careers in aviation.

Very much like the military, Republic has created a closed-loop training environment in which LIFT's part 141 flight training program is uniquely aligned with Republic's Standard Operating Procedures (SOP) philosophy. LIFT Academy is a wholly owned subsidiary of Republic, which in return allows for the training and operating philosophies to be shared across both certificate holders. This close alignment allows for Republic and LIFT to maintain a unique training program that acts as a closed-loop system with continuous feedback and ongoing enhancements through program assessments, correlating with the part 121 carrier's Advanced Qualification Program (AQP) data analysis. Though it is not unique for a part 141 flight training program to mirror certain part 121 operating philosophies, it is however the very essence of the R-ATP Program that immerses LIFT students into their desired operating environment surrounded by system safety from day one.

The closed-loop, integrated program curriculum, takes a student from initial flight training to become qualified as a First Officer applicant at Republic through a controlled and rigorous environment. Republic's R-ATP Program is focused on a selective admissions process, an airline-based training environment, advanced academics, daily assessments, and data-validation of measured performance criteria to meet the required qualification standard minimums.

Students will be assessed daily and are required to pass multiple knowledge and skill validation gates throughout the Program's life cycle to ensure that they meet the rigorous performance standards. Failure to pass any gate will result in the student being transitioned out of the R-ATP Program and continuing through the standard ATP path.

3.1.2 Republic R-ATP Program creates an efficient, direct, and closed-loop path to becoming an airline pilot [reason you seek relief]

In 2010, Public Law 111-216 created a requirement for pilots operating for part 121 air carriers to have an ATP certificate along with 1,500 flight hours. Additionally, the Public Law allowed the FAA to create pathways to obtain a restricted ATP certificate with reduced flight hours in accordance with 14 CFR §61.160(a)-(d). This petition is consistent with the standards set forth in the law, the rule, and the need for all pathways to create a safer and qualified pilot.

It is Republic's intention to meet and/or exceed those requirements listed in the law and the rule in order to remove hurdles for new students looking to enter the aviation industry. The Republic R-ATP Program provides quality and structured training for students pursuing a career as an airline pilot. The Program is comprehensive, demanding, and rigorous, and it requires students to train 5-7 days per week either in a simulator or an aircraft. Students' flight proficiency is continually assessed through training via lessons, stage checks, knowledge, and practical exams. Throughout the Republic R-ATP Program, students train in an airline environment and learn a set of SOPs used by the part 121 air carrier that will ensure they safely transition to Republic flying.

The Republic R-ATP Program provides an efficient and well-defined path to becoming an airline pilot through a well-rounded, robust, and comprehensive training curriculum that far exceeds basic ground/flight school and what is required for pilot certification. This will allow a safer and more diverse group of aviators to enter the industry. The path is intended to provide an exposure for certain demographics who have not previously been afforded the opportunity. Republic is making this more accessible through community outreach initiatives and financial support.

The Republic R-ATP Program resembles U.S. military training by providing comprehensive and structured training for civilian pilots through comprehensive training that satisfies the spirit of the regulations, while enhancing safety and providing a significant benefit to the public.

4 Public Benefit in Granting the Request

4.1 § 11.81(d) The reason why granting your request would be in the public interest; that is, how it would benefit the public as a whole

4.1.1 Increasing Diversity in the Aviation Industry

4.1.1.1 The Industry has not been successful in opening opportunities for diverse candidates

Sluggish industry progress toward diversification of cockpit participation calls for a renewed industry-wide commitment to diversity, equity, and inclusion. This is clearly a broken pipeline. As shown in Figure 1 and Table 1, minority composition of CFIs domestically has made little progress in reaching minority industry participants with existing avenues to entry and methods to eliminate the structural attainment gap.

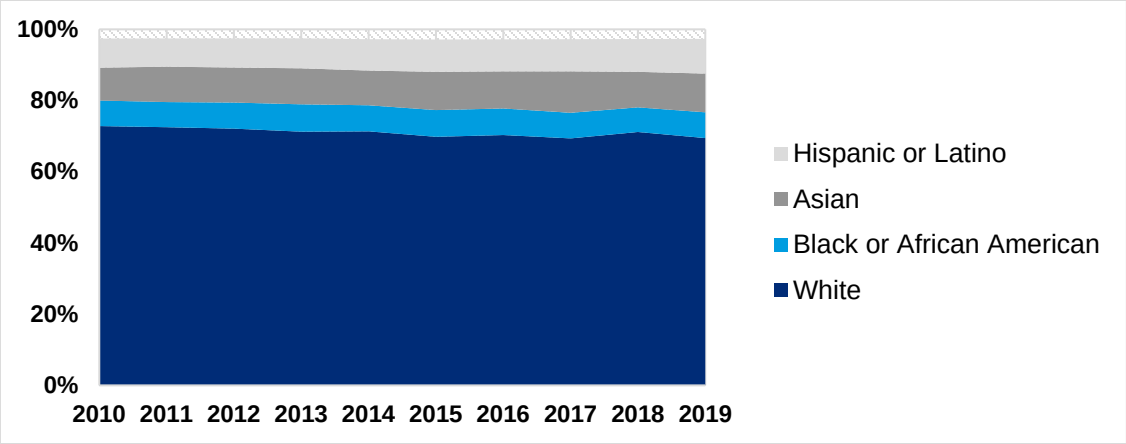

Figure 1: CFI Employment by Race and Ethnicity

	% U.S. Population		% CFI Participation	+/(-)
White	60.1		69.5	+9.4
Black or African American	13.4		7.2	(6.2)
Asian	5.9		10.9	+5.0
Hispanic or Latino	18.5		9.8	(8.7)
Other	2.1		-	(2.1)

Table 1: US population and CFI participation by race and ethnicity

Female ATP certificate holders have increased only < 1% over the past 10 years, similarly paced with other minority populations.

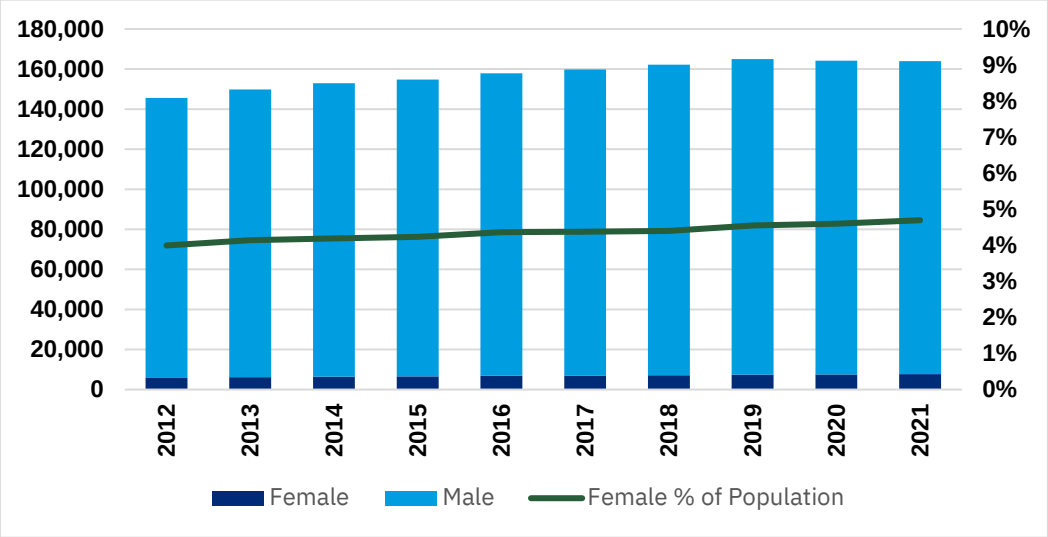

Figure 2: ATP Certificate Holders by Gender

The industry-wide effort over the past decade has failed to reach women and minority populations, who stand to have a transformative impact on commercial aviation.

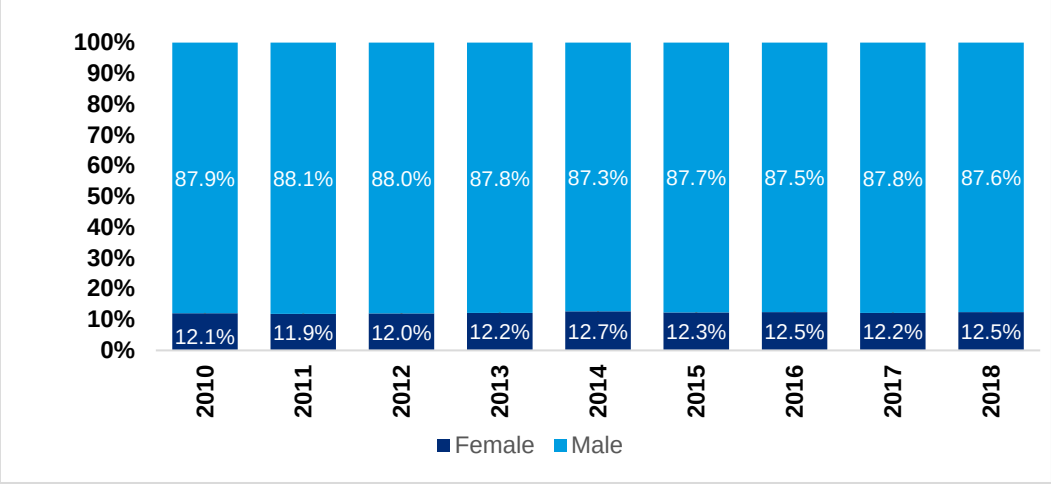

Figure 3: CFI Employment by Gender

4.1.1.2 Opening up opportunities for Diversity, Equity and Inclusion by mitigating the financial burden on candidates to obtain professional pilot training

The Republic R-ATP Program provides a cost-effective means to flight training that is accessible to a large pool of candidates including those from underrepresented minority groups.

Historically, pilot training has been both expensive and self-financed. The cost of pilot training in the U.S. varies by school, but part 141 flight schools and aviation four-year university programs can typically be cost prohibitive for many, particularly aspiring pilots from underserved communities. Combined flight training and tuition costs can exceed $200,000 for top degree programs, as shown in Figure 4.

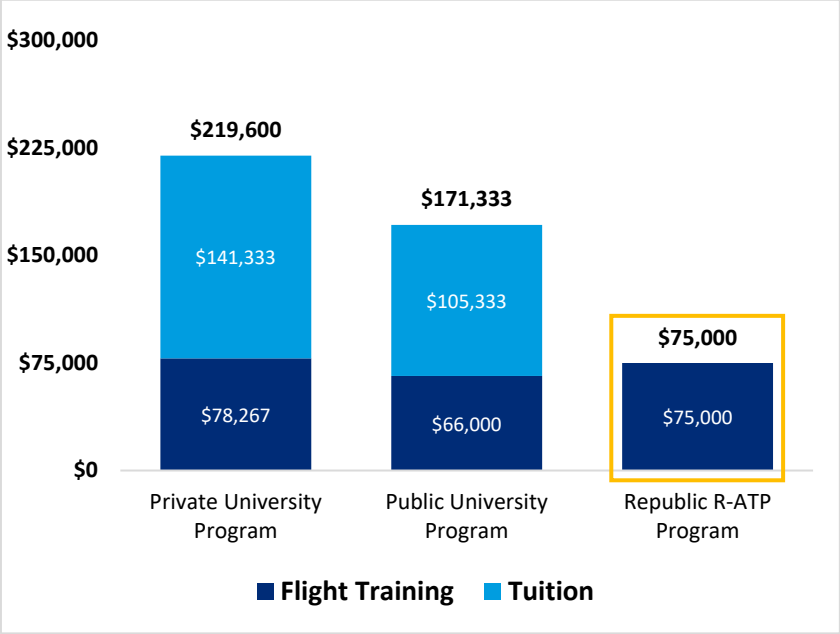

Figure 4: Education costs for public and private programs: for degree and flight training through MEI

In many cases, pilot training has become accessible only for students who have the financial means personally or through family funding. These programs all provide the training required to become a part 121 airline pilot; however, four-year degree programs are significantly more expensive and require additional years to complete compared to the proposed Republic R-ATP Program.

The flight training portion of university aviation programs is comparable to non-degree programs; however, students must also pay for tuition if they are to receive a restricted ATP certificate. Flight training and tuition costs for these four-year degree programs include the cost of CFI training but exclude additional costs for students to accumulate enough hours to be eligible for the restricted ATP. In addition to flight training and tuition costs, students in 4-year programs spend an average of $40,000 on room and board, further increasing the financial burden on students. In the Republic R-ATP Program, students are employed through Command Experience after approximately 14 months, which helps offset their cost of living. The cost of the Republic R-ATP Program includes all training costs that are required to become a Republic pilot. This makes this Program more accessible to highly qualified candidates from more backgrounds.

Four-year degree program costs can be a significant barrier for some highly qualified students, and puts pilot training out of reach, especially those in socioeconomically disadvantaged communities. Republic offers pilot training that is more accessible and provides further financial support to highly qualified candidates who would otherwise be unable to pursue pilot training. This creates additional pilot training opportunities with broader community access.

Republic's R-ATP also better prepares pilots for an airline career since their academic and leadership development is focused on preparing to safely operate for a part 121 air carrier from the start of training.

Admissions data from the LIFT Academy shows that approximately half of the students who apply to LIFT are accepted into the program (Figure 5). Of those accepted, approximately half decide to enroll in the program. Of those who enrol in the program, approximately 40% are unable to start the program for financial reasons (Figure 6). These individuals made it through the rigorous admissions process and were fully qualified to start pilot training. However, the financial burden for pilot training did not allow them to pursue this career path. This includes students who do not have personal savings or who are denied a loan. For example, a qualified candidate out of high school may not have an established credit record to qualify for a loan. This candidate may then require a co-signer with a strong credit record for the loan but may not find one. Funding is a barrier for some highly qualified students to pursue pilot training and leaves many qualified candidates unable to start pilot training.

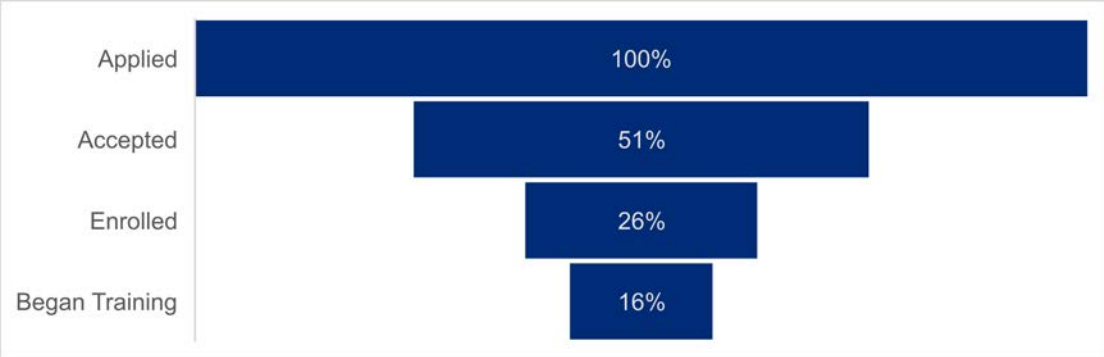

Figure 5: LIFT student admissions funnel

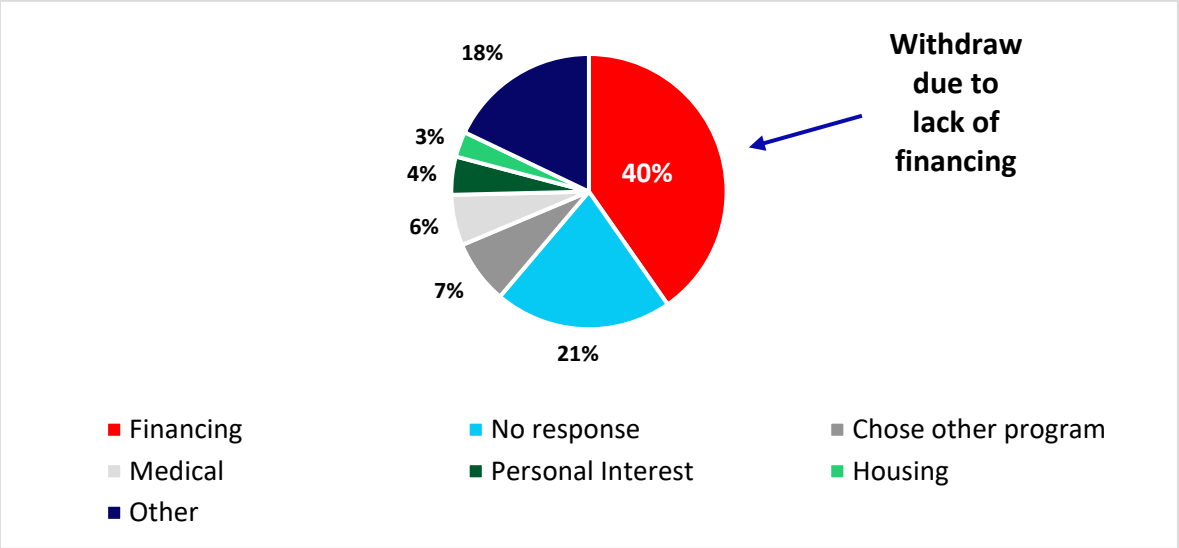

Figure 6: Reasons enrolled students do not begin training at LIFT

LIFT data also shows that students from diverse ethnic backgrounds require loans 10 - 40% more often than white students (Figure 7). This suggests that these students have higher financial barriers to pursue pilot training, and disproportionally are unable to enroll for financial reasons. In addition, preliminary LIFT analysis suggests that students who are self-funded tend to graduate faster. Those who require a loan to pursue pilot training may have increased financial pressure or are required to work during their training. Republic's financial support for its R-ATP students will help students focus on and excel throughout the Program.

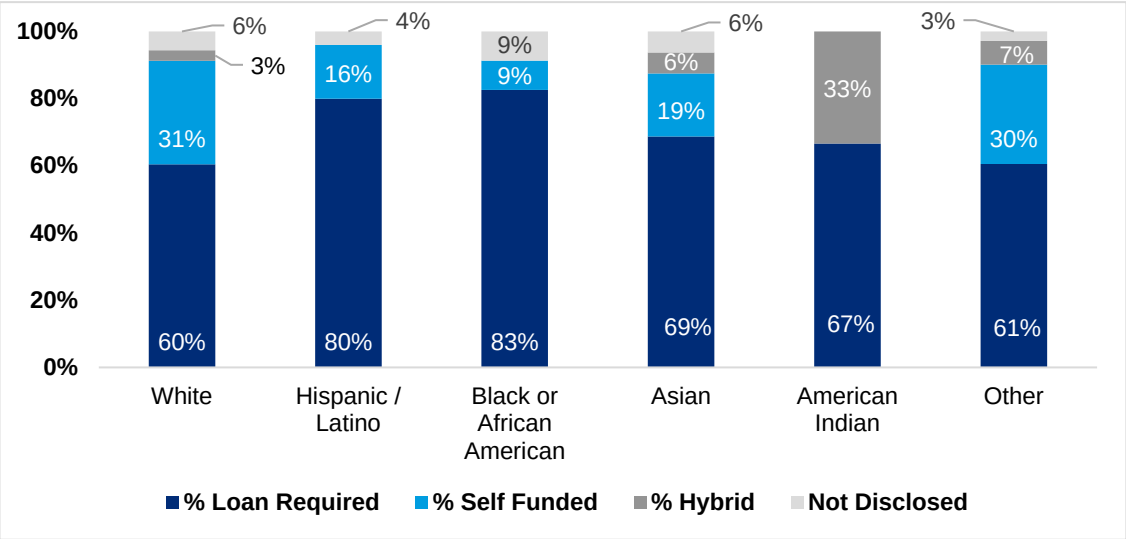

Figure 7: Funding type by race/ethnicity

4.1.1.3 Providing financial support for pilot training

Republic's R-ATP Program will make pilot training more accessible to qualified candidates through financial support, an efficient training program, and unbiased assessment tools.

4.1.1.3.1 Reduced cost of pilot training through financial support

Republic believes that pilot training should be accessible to qualified candidates regardless of their financial situation. Republic has included several financial support mechanisms and works with its partner organization that will help students access pilot training:

- **Training subsidy:** In contrast to other top degree programs, the Republic R-ATP Program offers airline-focused high quality, rigorous flight training to students at a subsidized rate. Republic subsidizes the cost of flight training for all students in the Republic R-ATP Program.
- **Scholarships:** The Republic R-ATP Program offers additional financial support to students from underrepresented groups who would otherwise be unable to afford pilot training. Republic will partner with organizations such as community groups and historically black colleges and universities to provide scholarships to high qualified candidates.
- **Stipend:** Republic offers a cost-of-living stipend for students who are otherwise financially unable to take time away from work to pursue full-time pilot training. This is especially valuable for students from underrepresented communities without savings who depend on income to support themselves and their families. The stipend covers the duration of part 141 and part 61 training before students earn wages during Command Experience and is awarded on a case-by-case basis given student needs. Like the military program, the stipend compensates students while they are pursuing pilot training so they can devote their time, energy, and focus to training in the Republic R-ATP Program.
- **Hourly salary for Command Experience training and flight instructing;** Republic R-ATP candidates will receive a salary during their command experience and Air Carrier Introduction training sections of the Program.
- **Loan assistance:** Republic provides loan assistance to candidates who are unable to secure financing on their own. This support will help reduce the barriers to becoming an ATP and diversify the pool of pilots at Republic.

4.1.1.3.2 Providing a more efficient training path for aspiring pilots

A typical aviation degree takes anywhere from 2 to 4 years to complete, in addition to building flight hours for the ATP certificate which can take an additional 2 years. Republic's training philosophy resembles that of the U.S. military, where pilots undergo rigorous training in a concentrated period of time in an integrated closed-loop system to prepare them for their future pilot careers. The Republic R-ATP Program offers a similar, efficient pathway for aspiring civilian pilots and provides several benefits to those students:

- Students can expect a rigorous and well-defined training path in a focused time period to becoming line pilots, thereby spending more time in airline pilot careers.
- Students can pursue an airline career at a lower cost (in an earn to learn environment) compared with other part 141 flight schools, as described above.
- Students build time learning carrier-specific skills that are transferable to part 121 air carriers, as determined by the carrier's AQP processes. This creates more efficient training compared to training that focuses solely on accumulating flight hours.

In addition, the Republic R-ATP Program trains pilots specifically for part 121 airline pilot careers. This helps satisfy the need for commercial pilots without drawing unnecessarily from the already-depleted corps of military pilots.

Figure 8 shows the return on investment for five pilot training programs. This was based on an internal analysis done by Republic. The Republic R-ATP Program provides a rigorous, focused path to civilian part 121 aviation that is both shorter and less costly for students, while providing significant public benefits. This analysis assumes that all students earn $25/hour during CFI employment (or Command Experience as part of the Republic R-ATP Program) and earn $46-$54/hour during First Officer employment (75 hours/month). In addition, Republic R-ATP Program sponsored students have the potential to receive a stipend of $15/hour (40 hours/week during pilot training and 15 hours/week during Command Experience). With the Republic R-ATP Program, students start earning money during Command Experience and start flying with a part 121 air carrier sooner.

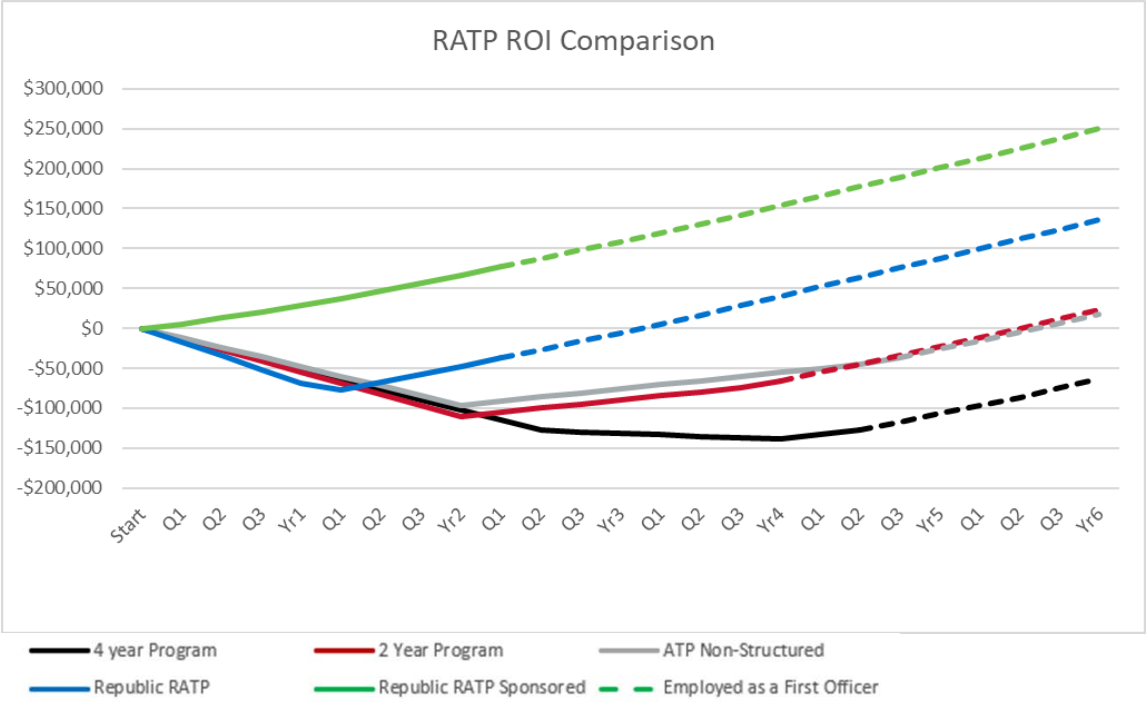

Figure 8: R-ATP Return on investment comparison

4.1.1.3.3 Unbiased assessment tools to recruit pilots based on aptitude, not financial means

As discussed in more detail below during the admissions process, selection for the Republic R-ATP Program is solely based on merit and aptitude to recruit the most deserving and highest quality of candidates. With Republic's subsidized and sponsored training program, pilot training becomes accessible to more students. This contrasts with other part 141 schools where there is significantly more time and financial burden required to become a pilot. Like the military, admissions to the Republic R-ATP Program are focused on the most qualified candidates, regardless of their financial situation.

4.1.1.4 Making pilot careers more accessible to a diverse set of candidates

In addition to providing financial sponsorship, Republic is partnering with community organizations to generate interest in aviation careers and help identify high potential candidates. To reach highly qualified aspiring aviators from these communities, Republic leverages LIFT's existing and expanding community outreach initiatives.

LIFT Academy participates in several community outreach initiatives to inspire and encourage aspiring aviators, especially those from underserved communities, to consider a career in aviation. LIFT Academy's outreach programs show young students exciting career

opportunities in aviation that they may not have otherwise considered. Key initiatives from LIFT's community outreach include participating in diversity conferences, offering summer camps, providing Virtual Reality pilot experience through the LIFT Lab, and promoting careers in aviation to STEM and aviation groups. Additional details are provided in Section 7. Republic's and LIFT's ongoing community outreach initiatives are providing opportunities for aspiring aviators from diverse backgrounds and enable more highly qualified candidates to become airline pilots.

4.1.1.5 Rigorous training

Republic believes that pilots who take advantage of this comprehensive and demanding training are better trained to operate in an airline environment. This, in turn, improves the service to the public. Republic teaches, prepares, and performs all its training with a focus on airline standards and procedures, all through a closed-loop system with regular testing, flight training, and gating items. Republic's training approach, which resembles military training, allows Republic and the FAA to monitor a student's performance data from the beginning through the end of the student's time in the Republic R-ATP Program.

4.1.2 Program is replicable by other airlines

Granting this petition will promote and serve the public interest because it may allow other part 121 air carriers to offer a similar program, subject to implementing a similar rigorous, structured, and comprehensive curriculum and program. Part 121 air carriers with a similar closed-loop system and data systems in place to compare pilot performance may replicate this program and open additional opportunities for underserved communities. Capable aspiring aviators will be able to pursue meaningful pilot careers through well-defined, structured, and financially sponsored programs of part 121 air carriers. This system may be duplicated and implemented by any part 121 air carrier that is willing to invest in building a closed-loop program with the rigor and controlled environment as described within this petition.

4.1.3 Meeting the industry's needs

The Republic R-ATP Program trains highly qualified pilots for careers at part 121 air carriers and provides opportunities for candidates from underserved communities to pursue careers in aviation. Pilots who complete the Republic R-ATP Program will provide a service to the public by satisfying continuing commercial aviation demand. Small communities who rely on commercial aviation services will benefit from additional well-trained pilots entering the aviation workforce.

4.1.4 Lowering impact on the Environment

While already efficient through the use of a low fuel burning engines in our training environment, the Republic R-ATP Program will further cut the carbon consumed by transferring training to ground-based advanced training devices providing equal or better learning experiences while also eliminating half the amount of carbon required through pilots out building time in unproductive flying.

* * *

For all of the reasons detailed above, granting the requested exemption would be in the public interest and benefit the public as a whole. 14 CFR § 11.81(d).

5 Level of Safety Equal to - or Above - the Existing Rule

5.1 § 11.81(e) The reasons why granting your exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to that provided by the rule from which you seek the relief

5.1.1 Supplementary training elements that emphasize the importance of safety

The Republic R-ATP Program is fully dedicated and focused towards training its students to become skilled and safety-minded pilots. Safety is the number one priority at both Republic and LIFT, and, as such, it is embedded in their culture and all of their operations from day one. The Republic R-ATP Program will train pilots to a level that meets or exceeds the safety standards of the military R-ATP in § 61.160(a) and § 61.159.

Students at LIFT are continually trained and assessed on the highest safety standards. Although the LIFT program is designed to follow U.S. regulations and standards, comprehensive safety programs at LIFT also address the eight core competencies for professional pilots, as agreed upon by the International Civil Aviation Organization ("ICAO"), International Air Transport Association ("IATA"), and International Federation of Air Line Pilots' Associations ("IFALPA"). These 8 competencies include:

1. Application of procedures and compliance with regulations
2. Communication
3. Aircraft Flight Path Management - Automation
4. Aircraft Flight Path Management - Manual Control
5. Leadership and Teamwork
6. Problem Solving and Decision Making
7. Workload Management
8. Situational Awareness

Each of the eight competencies listed above contain safety elements that are developed by students throughout the Republic R-ATP Program from initial training through Specialized

Advanced Airline Training. To confirm pilots are performing to the appropriate competency level and highest safety standard, data points are tracked through training and go through a correlative data review (Section 5.1.2). This ensures that the Republic R-ATP Program pilots will be trained to meet or exceed the safety of the military R-ATP compliance to § 61.159.

The Republic R-ATP Program includes four primary gates:

1. Pilot Selection Process
2. Flight Training (Part 141 & 61 Curriculum Training) - maximum two check ride failures
3. Advanced Airline Academics Validation
4. Certificate of Program Completion

The following sections will provide an overview of the Republic R-ATP Program which include:

5.1.1.1 - Pilot Selection Process

5.1.1.2 - Flight Training (Part 141 & 61 Curriculum Training)

5.1.1.3 - Advanced Airline Academics

5.1.1.4 - Mentorship Program

5.1.1.5 - Command Experience

5.1.1.6 - Specialized Advanced Airline Academics

5.1.1.7 - Enhanced Training Environment

5.1.1.8 - Common Training Philosophy

5.1.1.9 - Safety Programs that are Aligned with Republic SMS

5.1.1.10 - R-ATP Program Gates

5.1.1.1 Pilot selection process

One of the key attributes the FAA described for allowing a reduction in flight hours for military pilots is the rigorous screening process they must undergo. LIFT has adopted a similar system that goes above and beyond that of a typical flight school.

> *"To be accepted into a pilot training program in one of the branches of the military, a person must undergo a rigorous screening process..." 78 Fed. Reg. at 42345.*

Similar to the military selection and admissions process, admission to the Republic R-ATP Program is equally stringent and includes a range of basic minimum, application, and comprehensive aptitude criteria. This process also provides data analysis opportunities to measure trending of aptitude and background demographic experience, similar to the Pilot Composite Scoring Method (PCSM) aptitude testing and skills assessments conducted by the USAF UPT-2.5 program[8].

[8] USAF UPT-2.5 Undergraduate Pilot Training program, Major General Craig D. Wills

Admission to the Republic R-ATP Program, along with a conditional job offer from Republic, is granted to those individuals who demonstrate a strong potential of successfully completing the focused and comprehensive training program. As such, the admission process is rigorous, highly selective, and consists of a multi-step process where candidates are screened and evaluated.

To be admitted into LIFT Academy, all applicants must meet these minimum criteria:

1. Be at least 18 years of age at the time of enrolment
2. Hold a valid US driver's licence
3. Be a US citizen or legal permanent citizen
4. Have a high school diploma or equivalent (2- or 4-year degree preferred)
5. Hold a class 1 medical certificate
6. Pass drug and alcohol testing
7. Pass criminal background check

The admission process consists of three main steps:

Step 1: Candidates are required to complete and submit an online application form. The online application collects basic candidate information as well as essay questions that evaluate a candidate's self-motivation to pursue a rigorous program, their understanding of the LIFT program, and the effort put forth in the application.

LIFT applicants with prior flying experience are also required to report and detail aspects of their previous experience, including:

- Type of training received.
- Number of flying hours accumulated.
- Whether they have previously failed a check ride with an FAA examiner or DPE.
- Whether they have previously been involved with any aviation incidents or accidents.
- Whether they have received a violation.

Candidates who have more than two previous check ride failures are automatically disqualified. Additionally, any potential red flags (e.g., whether a candidate with previous flying experience spent longer than usual to earn their private pilot certificate) are also assessed and considered on a case-by-case basis in the decision to be selected for an interview.

The LIFT program seeks to attract individuals who hold a two or four-year degree from an accredited undergraduate institution but recognizes this may create an unintended barrier to the program. However, applicants with a two- or four-year degree are generally preferred since post-secondary education can provide more life experience and increases student maturity; this criteria is very similar to military training where an undergraduate degree is preferred but not required.

For example, while the U.S Air Force requires its pilots to hold a degree, the U.S Army does not, and many Army pilots without a degree have successfully completed their rigorous training and subsequently have gone on to become eligible for the R-ATP 750-hour rule. Consistent with this structure, we believe that a degree is not what ensures a pilot's success but rather the quality and rigor of the closed-loop system in which they train.

Step 2: Candidates who meet requirements 1-4 listed above and satisfy the online application criteria are invited for an in-person interview with the LIFT admissions team. The in-person interview is designed to determine the applicant's ability to succeed as an airline pilot at Republic. Key areas evaluated include, but are not limited to, the applicant's professionalism, decision-making, time-management, communication, judgement, and ability to overcome obstacles. These areas are assessed via behavioural questions.

Candidates with previous flying experience are also asked additional technical questions by a Certified Flight Instructor ("CFI") at LIFT. The CFI assesses the applicant's previous training and ensures that the applicant understands basic concepts related to aviation and becoming a pilot. Additionally, the CFI reviews the applicant's logbooks from previous instructors and checks for any red flags. Potential red flags include:

- Whether they have flying experience but do not have a private pilot certificate.
- Whether they took longer than usual to earn a private pilot certificate.
- Whether they have any violations or certificate actions.

Any potential red flags are evaluated and considered on a case-by-case basis in the decision to be accepted into the Republic R-ATP Program.

Candidates are also required to complete a battery of aptitude tests that consist of the WOMBAT Situational Awareness and Stress Tolerance test, The Sixteen Personality Factor Questionnaire ("16PF"), and the Tabular Speed Test. Details on the tests are provided below:

- WOMBAT[9]: A computerised test designed to measure the situational awareness, stress tolerance, and attention management abilities of complex system operators such as pilots, air traffic controllers etc.
- 16PF Questionnaire[10]: A self-report personality test that provides a normal-range measurement of anxiety, adjustment, emotional stability, and behavioural problems.
- Tabular Speed Test[11]: A paper-and-pencil multiple choice test that assesses perceptual speed.

[9] **WOMBAT:** Roscoe, S.N., & Carol, L. (1987). Wonderful original method for basic airmanship testing. Proceedings of the Fourth International Symposium on Aviation Psychology, 493-499. Columbus, OH: Department of Aviation, The Ohio State University

[10] **16PF Questionnaire:** Cattell, H. E. P., & Mead, A. D. (2008). The Sixteen Personality Factor Questionnaire (16PF). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment, Vol. 2. Personality measurement and testing* (pp. 135–159)

[11] **Tabular speed test:** The Tabular Speed Test© is used to screen pilots on perceptual speed. Damos Aviation Services. (2022, January 17). Retrieved February 9, 2022, from https://damosaviation.com/products/tabular-speed-test/

There is a wealth of scholarly evidence suggesting that the aptitude tests used in an admissions process are predictive of flying performance of trainee pilots. This is also in line with unpublished preliminary evidence at LIFT suggesting that performance on the WOMBAT, 16PF Questionnaire, and Tabular Speed Test predicts students' success at the academy. Some key studies pertaining to the association between the aptitude tests and flying performance are mentioned below.

- WOMBAT:
    - O'Hare (1997)[12] showed that WOMBAT test measures individual ability to maintain situational awareness, and that this ability is found in high levels in elite pilots.
    - Caponecchia et al. (2018)[13] found that higher WOMBAT scores were associated with lower flight time to first solo and certificate achievement of trainee pilots. These effects were independent of sex, time speaking English, and frequency of video game play.
- 16PF Questionnaire:
    - Bartram (1995)[14] showed that the personality profiles of applicants to pilot training programs differ markedly from the general population and look remarkably similar to that of experienced airline pilots.
    - In line with Bartram's (1995) "pilot personality profile", Wakcher et al. (2003)[15] found that pilot incumbents and pilot applicants scored significantly greater on intelligence, emotional stability, and maturity in comparison to the general population norm.
- Tabular Speed Test:
    - Mekhail et al. (2010)[16] found a significant positive correlation between scores on the Tabular Speed Test and time to first solo flight, time to private certificate achievement, and GPA.
    - Hoermann and Damos (2019)[17] showed that correct responses on the Tabular Speed Test were positively correlated for both new and certificate pilots with

[12] **O'Hare, D. (1997).** Cognitive ability determinants of elite pilot performance. Human Factors: The Journal of the Human Factors and Ergonomics Society, 39(4), 540–552. https://doi.org/10.1518/001872097778668004
[13] **Caponecchia, C., Zheng, W. Y., & Regan, M. A. (2018)**. Selecting trainee pilots: Predictive validity of the Wombat Situational Awareness Pilot Selection Test. Applied Ergonomics, 73, 100–107. https://doi.org/10.1016/j.apergo.2018.06.004
[14] **Bartram, D. (1995).** The predictive validity of the EPI and 16PF for military flying training. Journal of Occupational and Organizational Psychology, 68(3), 219–236. https://doi.org/10.1111/j.2044-8325.1995.tb00583.x
[15] **Wakcher, S., Cross, K., & Blackman, M. C. (2003).** Personality comparison of airline pilot incumbents, applicants, and the general population norms on the 16pf. Psychological Reports, 92(3), 773–780. https://doi.org/10.2466/pr0.2003.92.3.773
[16] **Mekhail, A., Niemczyk, M., Ulrich, J. W., & Karp, M. (2010).** Using the table reading test as an indicator for success in pilot training. Collegiate Aviation Review International, 28(1). https://doi.org/10.22488/okstate.18.100404
[17] **Hoermann, H.-J., & Damos, D. L. (2019).** The Use of a Perceptual Speed Test in Civilian Pilot Selection. 20th International Symposium on Aviation Psychology, 391–396.

measures of quantitative and spatial abilities, visual memory, multi-tasking, and psychomotor performance.

In reference to the studies listed above, LIFT Academy considers scores on the WOMBAT, Tabular Speed Test and 16PF Questionnaire in the admissions decision. Preference is given to applicants who score high on the WOMBAT and Tabular Speed Test, as well as those who score high on intelligence, emotional stability, and maturity as indicated by the 16PF questionnaire. Those who score high on the questionnaires are more likely to excel in LIFT's training program.

Step 3: Candidates must provide proof of program requirements and funding.
Candidates who pass the in-person interview are invited to join LIFT Academy's training program. In addition to meeting the admissions criteria above, students must provide proof of funding or receive Republic's sponsorship confirmation.

Rigorous selection process
The Republic R-ATP Program's selection process is highly selective and is akin to the admission process for the U.S Air Force pilot training program. For example, qualified candidates are required to hold a class 1 medical certificate and pass a criminal background check prior to beginning training. An online application and aptitude tests were also packaged to mimic the Air Force Officer Qualification Test (AFOQT) and Test of Basic Aviation Skills (TBAS) used by the U.S. Air Force, which assess general knowledge, cognitive, multi-tasking, and psychomotor attributes. As such, Republic R-ATP Program's admission process implements the highest standards of selection to maximize the probability of developing highly qualified airline pilots.

5.1.1.2 Flight Training (Part 141 & 61 Curriculum Training)

Following enrollment, students will begin flight training where they are responsible to train 5-7 days per week either in a simulator or an aircraft. This rigorous training environment is similar to the military to ensure commitment, skills, knowledge, and professional standards are maintained and upheld. Accordingly, the FAA stated this as an attribute for the military pathway hour reduction:

> *"...during the flight training phases, an Air Force student pilot participates in flight training every day, either in a simulator or an aircraft...." 78 Fed. Reg. at 42345*

During the duration of flight training, students are required to obtain 7 certificates/ratings prior to transitioning to Command Experience (Section 5.1.1.5). These certificates are a combination of those required for an ATP certificate and for the Republic R-ATP Program. This requirement ensures that all students who go through the Program are trained, monitored, and assessed in accordance with the approved training program during flight training, Command Experience, and specialized advanced airline training.

Students are required to obtain the following certificates and ratings:

1. Private Pilot Certificate
2. Instrument Rating
3. Commercial Pilot Certificate
4. Multi-Engine Rating
5. Certified Flight Instructor
6. Certified Flight Instructor – Instrument
7. Multi-Engine Instructor

As a student progresses through flight training, they are held to the Airman Certification Standards ("ACS") while operating in an enhanced training environment (Section 5.1.1.7) coupled with Republic's common training philosophies (Section 5.1.1.8). LIFT training as part of the Republic R-ATP Program, goes above and beyond those requirements and includes attendance tracking, continually working in a complex ATC environment, and upset recovery. Students also participate in observation flights, where they fly as an observer during other students' training flights. These observation flights are in addition to the required training students must complete and provide further opportunities to improve their knowledge and command experience skills.

Throughout the duration of training, the candidate is continuously assessed to ensure adequate progression and completion of the rigorous flight program. The assessments flag students with failures (lesson, written, stage check, etc.) and trigger advisory sessions to intervene and address any abnormalities that occur, as defined in the LIFT Part 141 Training Course Outline ("TCO"). A plan of action will then be established by training advisors or instructors to address and retrain as needed.

The following will trigger an advisory session:

1. Double lesson failure
2. Refresher flight failure
3. Stage check failure
4. Checkride failure
5. Written exam failure
6. Unsatisfactory completion of a previously established Plan of Action (POA)

Students who show a pattern of failure as outlined within the TCO will be escalated to the Flight Operations Management team for review. This process allows LIFT to assess students in a holistic fashion and to properly determine if the candidate should remain within the Republic R-ATP Program.

Following the completion of the LIFT flight training program, pilots who met the Republic R-ATP standard and failed no more than 2 check rides begin Command Experience alongside advanced airline academics and a mentorship program.

5.1.1.3 Advanced Airline Academics

The Republic R-ATP Program requires pilots to complete advanced airline courses to ensure there is integrated coursework throughout the duration of training. These courses are designed to enhance aviation knowledge that is above and beyond that required to fulfill LIFT pilot certifications and ratings. The academic courses are designed to be rigorous in nature and better prepare individuals for a career as an airline pilot. The advanced courses (Table 2) are a combination of key subject areas outlined in AC 61-139[18]. for R-ATP collegiate programs and those designed to teach leadership, system safety, decision-making, and responsibilities of flying as a part 121 pilot.

Table 2: Advanced Airline Academics

Subject	Instructional Hours	Additional Aviation Coursework
Aerodynamics and Aircraft Performance[18]	~64	This course is designed for a pilot to better understand the principles of airplane aerodynamics, aircraft performance, and weight and balance
Aircraft Systems[18]	~42	This course is designed for a pilot to understand and explain basic and advanced aircraft systems to include system design and regulations
Aviation Human Factors[18]	~44	This course is designed for a pilot to understand and identify human and environmental factors that affect aviation
Air Traffic Control (ATC) and Airspace[18]	~44	This course is designed for a pilot to understand and apply critical elements of ATC within the National Airspace System (NAS)
Aviation Law and Regulations[18]	~32	This course is designed for a pilot to understand CFRs and rulemaking, contract and labor agreements, and aviation security
Aviation Weather[18]	~42	This course is designed for a pilot to understand and apply weather conditions as it relates to operation of an aircraft

[18] AC 61-139 outlines key academic subject areas that a student must complete as part of a collegiate R-ATP program.

Aviation Safety[18]	~32	This course is designed for a pilot to understand and identify safety issues affecting the operation of flight and SMS programs
Airline Operations	~42	These courses are designed for a pilot to understand airline business, operations, decision-making, and the responsibilities of flying as a part 121 pilot
Advanced Academics Review	~20	Review coursework and prepare for final exam

Hands-on experience: As part of the Advanced Airline Academics, LIFT students visit Republic headquarters (Indianapolis headquarters), which includes Dispatch Center, Crew Scheduling, Maintenance Control, and Engineering along with visits to an air traffic control tower and the Republic maintenance hangar. These in-person visits improve students' understanding of Republic's organizational structure, operational setup, aircraft, and airport operations.

The Advanced Airline Academics are a combined total of ~370 hours of instructional computer-based training (CBT). This includes knowledge exams at the conclusion of each course to validate a student's understanding of the academic area. Following the satisfactory completion of the eight courses and exams, a final exam will be administered and monitored by instructors to validate knowledge within all subject areas. The Advanced Airline Academics coursework will follow Republic's Instructional Systems Development (ISD) process in its AQP. Additional course details are available upon request.

Candidates must satisfactorily complete the academics in parallel with flight training, Command Experience, and Specialized Advanced Airline Training. This integrated coursework ensures a continued growth in their aviation knowledge alongside building flight experience.

5.1.1.4 Mentorship Program

To better prepare students for a transition into Republic, they enter a mentorship program approximately 12 months prior to attending Republic's Basic Indoctrination (INDOC) training. This program will continue during the remainder of the Republic R-ATP Program through their first year of flying part 121 operations. During this time, students are matched with a current and qualified Republic line pilot who will prepare, guide, and mentor their experience from general aviation to an airline environment.

This will commence with a meet and greet focused on introductions, expectations, and general questions, followed by monthly check-ins to discuss training progress, answer questions, and discuss aspects of airline life.

5.1.1.5 Command Experience

Following the conclusion of all required part 141 and 61 training, students begin Command Experience which is designed to integrate the Advanced Airline Academics with continued flight

experience. This coupled with a mentorship program enhances their aviation knowledge while continuing to operate in the Republic environment. Similar to military training, LIFT has a controlled and rigorous closed-loop environment that extends beyond initial flight training.

Candidates build their experience as a LIFT flight instructor where they will have annual proficiency checks and observation flights. This experience can be gained through other monitored avenues but must be within the Republic R-ATP Program's closed-loop environment. This ensures that all training and flight experience is tracked through the correlative data review (Section 5.1.2).

CFIs at LIFT are employees and are monitored as such. LIFT collects data on CFI activity and performance, as described below:

- **Total time:** LIFT keeps data on CFIs' average hours per month, flight time, ground time, and number of flight and ground lessons.
- **Student performance:** Each lesson that a LIFT student attempts is scored, and the instructor who taught the lesson is recorded in LIFT's database. LIFT also tracks the instructor's performance, monitoring their student's success on DPE check rides and knowledge checks.
- **Reliability:** LIFT tracks several reliability metrics to ensure CFIs are held to strict professional standards (e.g., reservations, cancellations [controllable and non-controllable], and sick days).

Like the military, students are required to follow a rigorous program of flying 5-7 days per week, and their performance is monitored throughout the duration of Command Experience.

5.1.1.6 Specialized Advanced Airline Training

An essential part of the Republic R-ATP Program is the additional training that pilots receive known as "Specialized Advanced Airline Training" to ensure comprehensive learning of advanced aviation academics for air carrier operations. These training elements are not provided in traditional pathways until candidates arrive for part 121 first officer qualification training.

Inclusion of advanced aviation development training is also supported in detail by the FOQ ARC recommendations for advanced training topics, such as knowledge and skill competencies specific to part 121 operations., all of which are included within the Republic R-ATP Program curriculum. Examples from the FOQ ARM include Advanced Aircraft Systems and Performance; Air Carrier Navigation; Air Carrier Operations and Safety and Security; High Altitude Performance; and so on.[19]

During this phase of the Program, candidates are also provided a combined training of part 121 and Republic procedures and philosophies. This educates pilots on the fundamentals of airline crew flying, maneuvers, and procedures with a knowledge validation event to conclude each course. Unlike military training where pilots specifically focus on military style operations, the specialized advanced airline training is designed to prepare students for the airline environment.

[19] See: FOQ.ARM.RR.20100928 – First Officer Qualifications Aviation Rulemaking Committee Report

Command Crew Flying

Candidates begin Command Crew Flying after obtaining 700 total flight hours and meeting the requirements outlined in § 61.159 (as listed below). This training is designed and tailored to teach crew concepts specific to those that will be experienced while flying at Republic, such as policies and procedures, a crew flying environment, effective communication, checklist philosophy, automation management and crew resource management. The training consists of an additional 50 hours of structured multi-engine time in a crew environment and will follow the ISD process in Republic's AQP.

To begin Command Crew Flying, candidates must meet the following pre-requisites:

1. Total Flight time: 700 Hours
2. Cross-Country: 150 Hours
3. Night: 100 Hours
4. Multi Engine Rating
5. Instrument flight time; 75 hours
6. PIC Time: 250 hours
7. PIC Cross-Country Time: 100 Hours
8. PIC Night Time: 25 Hours
9. Completion of Advanced Airline Academics

Air Carrier Introduction Training
Following Command Crew Flying, candidates continue advanced training through Air Carrier Introduction Training. This training is conducted approximately 4 weeks prior to the start of Republic's Initial Qualification ("IQ") program and prior to students attending an ATP/CTP course, and introduces pilots to callouts, the flight guidance panel, approach requirements, and specific Republic maneuvers and procedures.

This training commences with 8 hours of ground school that introduces Republic policies, procedures, SOPs, profiles, and expectations. This is followed by a total of 24-hours (4 sessions including pre- and post-session briefings) in a Level 4 Flight Training Device ("FTD"), where students receive instruction on the flight guidance panel, flight management system, and various approaches. Finally, a student trains for a total of 12 hours (2 sessions including pre- and post-session briefings) in a Level D Full Flight Simulator ("FFS") to gain familiarity flying a jet in a crew environment along with the introduction of advanced maneuvers (including Upset Prevention and Recovery (UPRT) and Flight Path Management. This seasoning training will follow Republic's ISD process in its AQP.

At the completion of Air Carrier Introduction Training, students will be required to attend two days of classroom instruction where they will prepare for a practice ATP written exam. Once a student completes the pre-test, they undergo a records review with their mentor, assistant chief instructor, and the Republic Flight Operations office to validate all training and gates have been successfully completed. This review includes a student interview that determines whether the pilot is ready and has sufficient knowledge to attend an ATP/CTP course and then transition to Republic's IQ program.

5.1.1.7 Enhanced Training Environment

The goal of LIFT Academy is to train students to become highly skilled and qualified airline pilots and to prepare them for a career at Republic. The Republic R-ATP standard differs from military training, where pilots train for different types of operational environments. Student training at LIFT Academy is integrated with Republic from day one, forming an integrated closed-loop system of training. LIFT students utilize advanced training equipment and methodology that mimics what Republic uses, thereby preparing LIFT student pilots to become qualified line pilots at Republic and reducing training redundancy. Several aspects regarding LIFT's aircraft, equipment and procedures are outlined below.

LIFT operates a standardized fleet of Diamond DA40 NG and DA42-VI aircraft equipped with Garmin G1000® NXi avionics. These aircraft were selected and configured with the intention of most closely matching the features and functionality of the Embraer E170/175 ("EJET") aircraft operated by Republic. Some of the aircraft features include:

- **Synthetic vision with Flight Path Vector ("FPV"):** This flight path vector is the primary cue on the Primary Flight Display ("PFD") of the EJET and is used at Republic when hand flying the aircraft or when flying by reference to the flight director. While a typical pilot in training at Republic is exposed to FPV symbology during initial training, LIFT students are exposed to this cue from hour one of training (primacy).

- **Single power lever operation:** LIFT's DA40/42 aircraft use the Austro Engine AE300 Jet-A fuel powered diesel powerplant. Each engine is controlled through a single lever using a digital control system ("FADEC") like the EJET. The skill and knowledge associated with traditional training aircraft powerplant management is superfluous to jet operations and can create behavior patterns that need to be retrained at the airline level.
- **Flight director/autopilot:** Each DA40/42 aircraft at LIFT Academy is equipped with an integrated Garmin GFC TM 700 autopilot with vertical and lateral navigation modes, including advanced modes found on the EJET (i.e., vertical navigation ("VNAV"), and Flight Level Change). Many aspiring pilots elsewhere are introduced to automation management during initial airline training, unlike LIFT students who are introduced to it at the primary level, as it is a critical to Part 121 airline flying. LIFT pilots are trained in the use of automation as an integrated workload management skill. A progressive building block approach is used which begins with hand flying using raw data, to the use of the flight director, and finally the use of autopilot.

LIFT Academy students are trained in an airline-style environment that includes formal dispatch and scheduling:

- **Dispatch:** During training, students will assess a variety of pre-departure factors prior to each flight to make a go/no-go decision (outlined within the TCO). This will be reviewed and approved by the student's assigned Instructor or designee.

  Flights will not be approved unless:

  - Weather minimums are met.
  - Fuel requirements are met.
  - The aircraft has no open maintenance discrepancies, and all inspections are current.
  - All flight planning is completed (weather, weight & balance, performance calculations)
  - For all solo flights, the instructor or his or her designee must ensure that the student has their pilot certificate, medical, endorsements (if applicable), and government-issued photo ID.
- **Scheduling:** As a pilot builds Command Experience, his or her flight schedules are built through "bidding" which mimics the airline process. Each instructor chooses his or her timeslots and days based on seniority and preference. This airline-style environment better prepares each pilot to life at the airline.

5.1.1.8 Common Training Philosophy

LIFT pilots are trained "the Republic way" from day one of the Republic R-ATP Program. LIFT's procedures are designed to mimic those of Republic to enable a seamless transition to part 121 flying.

LIFT pilots use an internally developed Flight Operations Manual ("FOM") and SOP when training or flying as a LIFT student or as an instructor during Command Experience. These manuals were created using Republic's FOM and SOP as templates, with necessary modifications made to reflect single-pilot resource management and operations as required by the FAA. The procedures and policies outlined in these documents are tightly coupled to those at Republic and introduce LIFT's pilots to the "Republic way" of operating as a pilot from day one. Some of the closely coupled procedures include, but are not limited to:

- **Briefings:** During each flight, LIFT pilots complete the following briefings, which mimic those that they will perform as pilots at Republic:
    - Passenger Briefing
    - Crew Briefing
    - Departure Review
    - Taxi Briefing
    - Takeoff Briefing
    - Approach Briefing
    - Land and Hold Short Operations ("LAHSO") Briefing
- **Electronic Flight Bag ("EFB") / Charting:** LIFT pilots are issued an iPad and Jeppesen charts for use throughout all flying sessions. Jeppesen charts are the industry standard in commercial aviation, and are what pilots use at Republic. Exposing LIFT students to this product from day one eases the transition to the airline.
- **ProSafeT[20]:** All LIFT pilots are given access to and use ProSafeT, an EFB web app that allows pilots to submit reports to LIFT's Voluntary Safety Reporting Program ("VSRP"). This is the same application that Republic pilots use to submit safety reports. Pilots build familiarity with both the interface as well as the overarching culture of Republic, reducing the need for training at the airline level. Refer to Section 5.1.1.9 for details on the LIFT Academy's VSRP.
- **Grading scale:** At LIFT, students are assessed task-by-task during each ground, simulator, and flight training session. The LIFT Academy uses the same four-point grading scale as Republic under its AQP. LIFT students become familiar with the grading scale and understand the meaning of each rating, ensuring that they can more readily understand their performance when transitioning to Republic's training program.
- **Automation policy:** LIFT's FOM contains an automation policy which clearly defines task management, transfer of flight controls, Republic's Confirm Activate Monitor

[20] **ProSafeT:** ProSafeT. (n.d.). ProSafe T software. ProSafeT. Retrieved February 9, 2022, from https://www.prosafet.com/site/aviation-software

Intervene ("CAMI") policy", and recommended automation usage including flight path management. This allows for a better understanding of the manual process it is accomplishing, along with the underlying stick and rudder skills taught. Both the underlying philosophy as well as the verbiage used when activating an automation change or transferring controls are tightly coupled between LIFT and Republic.

- **Flows and Checklist Usage:** LIFT pilots perform checklists using the same methodology as Republic pilots, which entails either a "do-verify" or "read-do" method depending on the checklist and phase of flight. This differs significantly from how checklists are used in the primary training environment at other training schools, where items are read one by one and completed as they are read. The ability of LIFT pilots to complete flows and back them up with checklists is assessed early in the Private Pilot training course through a Procedures Validation that was adapted and modelled from Republic's AQP Initial Qualification ("IQ") program.
- **Emergency Procedures:** All LIFT aircraft are equipped with a Quick Reference Checklist ("QRC") and Quick Reference Handbook ("QRH") that have the exact same fit and finish as Republic's QRC and QRH. These documents are designed and printed by the same Technical Publications department that Republic uses (this applies to all LIFT manuals). Training LIFT pilots to manage inflight abnormalities and emergencies with the same tools as Republic pilots from day one increases the likelihood for a smooth and safe transition to Republic.
- **Callouts and Policy:** LIFT pilots use the same (or similar, if necessary) callouts during different phases of flight as Republic pilots. For example, callouts are used during takeoff and instrument approaches. LIFT pilots also follow a stabilized approach policy that mirrors Republic's callouts to confirm a stable approach, and a mandatory go around policy, callouts, and procedures should the approach become unstable. There are many additional policies and procedures which closely or identically mirror those at Republic, including but not limited to:
    - Guarding thrust levers on takeoff and climb out
    - Setting heading and altitude bugs prior to takeoff
    - Rejected takeoff (Go, No-go decision)
    - Descent planning

LIFT's training methodology is specific to Republic, which better prepares pilots for the airline operating environment at Republic.

5.1.1.9 Safety Programs that are Aligned with Republic SMS

Safety is the top priority at the LIFT Academy. To support and enhance the culture of safety, LIFT operates the Voluntary Safety Reporting Program ("VSRP"): a non-punitive program where pilots can report safety concerns, unintentional violations, and pilot deviations. This program is similar in nature to Republic's, which allows students to be immersed in the safety culture of a part 121 air carrier and better understand safety processes. The VSRP applies to all pilot personnel of LIFT, and serves several purposes:

- Improves flight safety.
- Identifies trends of increased risk and creates a pathway to propose corrective actions to mitigate these risks.
- Exposes LIFT pilots to a non-punitive safety culture (airline standard) where mistakes and risks can be openly self-reported without fear of reprisal or punishment – from day one.
- Exposes LIFT pilots to the underlying processes and technology used at Republic to participate in their version of the VSRP, the Aviation Safety Action Program ("ASAP") program.

LIFT's VSRP has several elements which report and share safety data with staff and students at the Academy, including:

- **Reporting procedures:** When a pilot observes a safety problem or experiences a safety-related event, he or she notes the problem or event and describes it in enough detail that it can be evaluated by a third party. The report should be submitted within 24 hours after the end of the duty shift or within 24 hours of having become aware of possible non-compliance
- **ProSafeT software:** As referenced earlier, ProSafeT is the same safety reporting software used by Republic pilots. All safety data is submitted, processed, and maintained within ProSafeT. This data is analyzed for trends to identify potential issues or systematic problems. These issues and/or problems are reported in the monthly safety reports.
- **Monthly safety reports:** Safety reports are deidentified by LIFT's Safety Manager and are then submitted via ProSafeT for review by LIFT's Event Review Committee ("ERC"). The ERC meets on a regular basis and is comprised of one representative from the safety department, one of LIFT's instructor pilots, and one representative from LIFT management. The ERC classifies each report with a severity using a list of Safety Severity Index definitions, creates responses to the submitter as well as corrective actions that are sent to the appropriate department for review and implementation. The ERC tracks submissions and monitors for systemic issues that appear across the operation to initiate necessary corrective actions.

- **Monthly safety newsletter:** LIFT also publishes a monthly safety newsletter for all pilots and staff, sharing lessons learned and identified safety trends with mitigation strategies.
- **Training:** The LIFT Safety Manager makes a safety presentation at new student or CFI orientation.
- **IMSAFE checklist:** Each LIFT employee and student is provided a lanyard card with the Illness, Medication, Stress, Alcohol, Fatigue, Emotions ("IMSAFE") checklist.
- **Poster cards:** Poster cards are placed throughout the LIFT facility to promote LIFT's VSRP

LIFT is also in the process of developing a program that mirrors current 14 CFR Part 5 Safety Management Systems requirements.

In addition to the safety programs outlined above, LIFT and Republic use data to predict how students will perform, and to monitor the success of the overall program. For additional detail on Republic's correlative data, see Section 5.1.2.

5.1.1.10 Republic R-ATP Program Gates

The Republic R-ATP Program is designed to continuously assess performance of each student throughout the Program life cycle. This controlled and rigorous Program is similar to the military's continuous assessment and program gates. Republic R-ATP candidates are required to pass all LIFT standards along with multiple assessment gates outlined in Table 3. These gates ensure students are performing at a level that qualifies them to continue within the rigorous Program.

Table 3: Assessment Gates

Gate	#1 Program Admission	#2 Checkride	#3 Knowledge Validation	#4 Certificate of program completion	ATP/CTP
Gates for	*Part 141 and Part 61 Training*	*Command Experience*	*Command Crew Flying and ATP/CTP*	*ATP/CTP course*	*R-ATP*
Prerequisites	- Online application - High school diploma - US Citizen/ permanent resident - Class 1 medical	- Admission to program - Completion of part 141 and part 61 certificates/ratings	- Completion of academic courses - 700 flight hours	- Completion of Command Crew Flying - Completion of Air Carrier Introduction Training - 750 total hours	Program Completion Certificate
Assessment details	- Interview - Aptitude tests - Background check	- Checkride at end of each part 141 and part 61 pilot course - Maximum 2 Checkride failures	- Knowledge checks for each academic training course - Final knowledge validation - once	- ATP written preparation - ATP written - Records review discussion with the pilot's mentor, the LIFT assistant	Completion of FAA Approved ATP/CTP course

	- Drug and alcohol tests	throughout part 141 and part 61 training	academic courses are complete - Evaluations from LIFT assistant chief pilot - Annual proficiency check - Observation flights - CFIs must perform job up to expectations, follow LIFT policy, keep student records	chief instructor, and the Republic Chief Pilot's office - Student interview with Review board to determine whether the pilot is ready to transition to Republic - DOT drug test - Criminal record check	

If a candidate is unsuccessful in completing a gate, they are provided the opportunity to resume training under a traditional ATP path at LIFT. This allows those who are well qualified but need additional training to continue pursuing a career as an airline pilot. Although this traditional pathway is less concentrated, a student that would typically pass under other programs may washout due to the high standards outlined in the LIFT standard operating procedures.

5.1.1.11 Safety as demonstrated by LIFT students

LIFT operates with the philosophy that skill learning and adherence to safety procedures and operations go hand in hand. As a testament to LIFT program's success in training its students to become safe and competent pilots, students at LIFT outperform the national average on several metrics. Although data is not yet available from the Republic R-ATP Program, historical data from LIFT suggests that students going through the Republic R-ATP Program will meet or exceed the level of safety of the military R-ATP and be successful through Republic's Part 121 IQ program.

- **Designated Pilot Examiners ("DPE") check rides:** The historical first time and total pass rates for LIFT students on DPE check rides are above the national average. For example, the total pass rates for LIFT students on private and commercial single check ride exams are 93% and 96% respectively (see Table 4 below). These pass rates are well above the national average according to a 2021 FAA report[21], which indicates that the national average for private and commercial single pass rates are 78% and 79% respectively.

Table 4: Check Ride Pass Rates - LIFT vs. FAA

Certificate Course Checkride	LIFT Pass Rates	FAA National Average Pass Rates
Private	93%	78%
Instrument	94%	n/a
Commercial Single	96%	79%
Commercial Multi	96%	n/a

[21] ***FAA Civil Airmen Statistics*. U.S. Civil Airmen statistics.** (2022, February 1). Retrieved March 1, 2022, from https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics/

- **Knowledge tests:** On average, LIFT students have an average pass rate upwards of 95% and average test scores upwards of 85% across knowledge tests associated with private, instrument, commercial, and CFI certificates (see Figure 9 below). LIFT students have significantly higher pass rates and average test scores compared to the national average for the year 2020 published by the FAA[22] (see Figure 10 below). This suggests that LIFT students perform above average in retaining pilot training knowledge, which helps ensure safe operations as airline pilots.

  LIFT students graduate with an average of over 300 flight hours which is well above the FAA minimum flight hours requirement. For example, while the industry average for hours to complete private pilot's certificate is 55-70 hours, LIFT students complete the certificate in approximately 73 hours. This is a testament to the quality and rigor of LIFT's training program. LIFT students gain additional experience at each level of their pilot training due to the extensive amount of training above and beyond the FAA's airman certification standards and intermediate phase checks, which helps reinforce safety standards and practices.

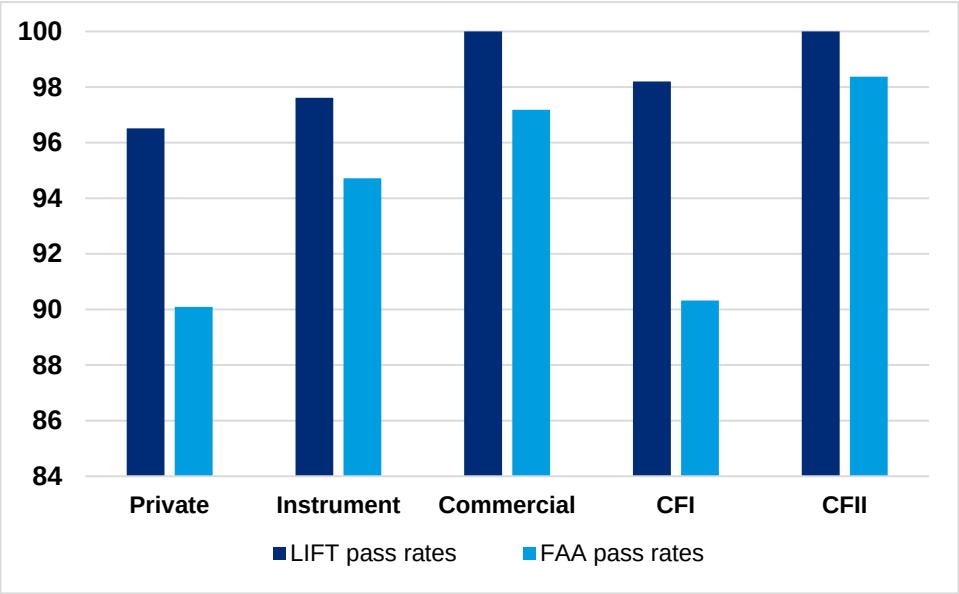

Figure 9: Knowledge test pass rates - LIFT and national average (as published by the FAA)

[22] ***2020 airman knowledge tests - federal aviation administration.*** *(n.d.). Retrieved February 22, 2022, from https://www.faa.gov/data_research/aviation_data_statistics/test_statistics/media/2020/annual/2020_Annual_Statistics.pdf*

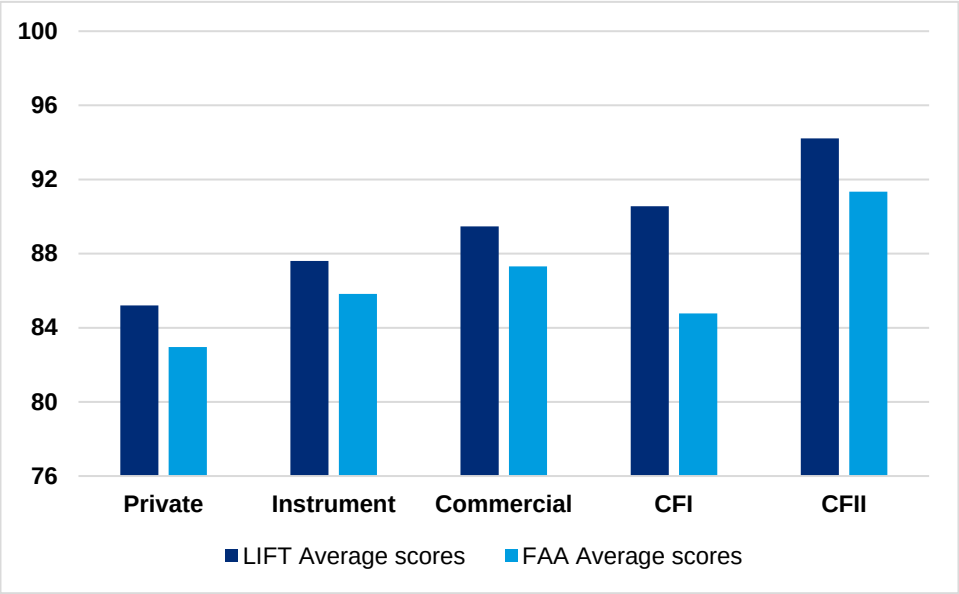

Figure 10: Knowledge test average scores - LIFT and LIFT and national average (as published by the FAA)

5.1.2 Correlative data review with AQP data

Republic's Advanced Qualification Program (AQP) process currently uses a closed-loop data system to assess performance and operational standards of LIFT Academy graduates already flying the line. In fact, correlative data collected already shows that LIFT Academy graduates consistently exceed safety standards in line performance, qualification, and continuing qualification (CQ) training.

Similar to military pilot training, pilot data is collected from the start of initial training at LIFT. Republic has complete ownership of data regarding students' performance at LIFT and Republic; consequently, the airline is fully aware of the training performance and history of pilots who transition from LIFT into the airline, making it easier to leverage their strengths and address any areas for improvement. In addition, the Republic R-ATP Program itself can be adjusted and improved based on data analysis of pilot performance, feedback, completion rates, and correlation with the airline's established AQP data infrastructure.

Republic has data infrastructure set up to monitor the Republic R-ATP Program at several stages while pilots are at LIFT and at Republic:

- R-ATP data
- Republic ATP/CTP
- Republic Initial Qualification and Continuing Qualification using AQP data

Republic R-ATP Program data:
Starting from day one at the LIFT Academy, Republic keeps a data portfolio of each student which includes performance across several areas. This data infrastructure is similar to the military environment since it is a closed-loop system that allows continuous performance assessment. Republic currently has student records of admissions data and part 141 and part 61 training and will begin tracking student data for the remaining Republic R-ATP Program elements once the Program begins. Republic will add R-ATP student data to its existing infrastructure once the student becomes a Republic employee. Prior to being granted a certificate of completion, the review board will review this portfolio and discuss performance with students during the interview. The performance-based data metrics tracked include:

- Admissions:
    - Aptitude test scores: WOMBAT, 16PF, Tabular Speed Test
    - Application essay and interview responses
- Part 141 and 61 training:
    - Daily Performance/Proficiency Assessment
    - Training data:
        - Lesson scores (correlated with Republic data measures and using Republic's 4-point grading scale)
        - Number of attempts per lesson
        - Procedure validation scores
        - Number of hours to complete each certification
        - Number of days in training
        - Reliability metrics (e.g., reservations, cancellations [controllable and non-controllable], and sick days)
    - Certificate and ratings data:
        - Hours to completion for each certificate/rating (including number of hours for day, night, dual engine, and solo flight time)
        - Check ride attempts, passes, and failures
        - Stage check attempts, passes, and scores
        - Knowledge check attempts, passes, and scores
- Advanced Airline Academics:
    - Knowledge check score for each course
    - Final knowledge validation
    - Time to complete each course

- Command Experience:
    - Student performance (student lesson scores, student pass rates on DPE check rides and knowledge checks)
    - Reliability metrics (e.g., reservations, cancellations [controllable and non-controllable], and sick days)
- Command Crew Flying:
    - Course completion rate
- Air Carrier Introduction Training:
    - Course completion rate
- ATP written preparation:
    - Test score

Republic ATP/CTP:
Although the Republic R-ATP Program is a structured, rigorous, and comprehensive pilot development training pathway designed specifically for part 121 operations, the Airline Transport Pilot Certification Training Program (ATP/CTP) will validate the success of the program.

The ATP/CTP, designed by the FAA as a prerequisite for the FAA's highest certificate, includes training in aerodynamics, automation, adverse weather conditions, air carrier operations, transport airplane performance, professionalism, and leadership and development.

Because the Republic R-ATP Program includes all of these training elements, the ATP/CTP course, conducted just prior to the Republic Airways First Officer Qualification training curriculum, also serves as a reinforcement experience of these important elements to transition pilots for part 121 operations. As a result, the required ATP/CTP program will not be a pilot's first exposure, but rather reinforcement also as to large turbine aircraft and how those aircraft perform at high altitudes and in adverse weather phenomena.

Republic R-ATP Program students will take the FAA approved ATP/CTP in-house at Republic. Having an in-house ATP/CTP is an important element of Republic's closed-loop system and enables Republic to add detailed data to the student's data portfolio. Republic monitors the following metrics in the ATP/CTP program:

- 30 hours of ground school
- 1 Flight Training Device Session
- 2 Flight Simulator sessions

In addition to the data benefits of having an in-house ATP/CTP, pilots who take Republic's ATP/CTP are better prepared for Republic's IQ. Republic performed a survey from 2018-2020 which compared the IQ LOE pass rates of pilots who took the Republic ATP/CTP and those who took the ATP/CTP from an outside vendor. On average, students who took Republic's

ATP/CTP had an IQ LOE pass rate up to 3% higher than pilots who took the ATP/CTP elsewhere.

Evaluation of Training Effectiveness

The Republic R-ATP Program is designed as a closed loop process through data collection and analysis from data collected throughout student selection, feedback, training performance, line performance behaviours, and operational objectives.

This end-to-end data collection and analysis throughout the entire pathway enables validation of key evaluation of training effectiveness objectives to maximize safety and program benefits. These benefits are:

1. Improve the program
2. Maximize the transfer of learning-to-behavior
3. Determine how the training is relational to results
4. Demonstrate the value of the training
5. Improve safety and efficiency through data-driven analysis, integrated within the SMS.

Republic Initial Qualification and Continuing Qualification:

An essential part of the Republic R-ATP Program is Republic's ability to track a candidate's performance from initial pilot training at LIFT through to IQ and CQ training. This data is carefully monitored and assessed in Republic's AQP. The results from lesson completion rate, validation success, and evaluation pass rate allow Republic to complete a comparative data review of Republic R-ATP Program pilots against other Republic pilots in AQP training (e.g., Military R-ATP, university program R-ATP, non-R-ATP pilots), to validate performance. This unique data arrangement is a result of the closed-loop environment from Republic owning and operating LIFT which allows Republic to have a holistic view of the pilot's complete training footprint and progression.

The AQP-like training in the Republic R-ATP Program gives Republic the ability to analyze Republic R-ATP Program training and operational data at LIFT to establish objective requirements. This provides LIFT with a multitude of training and safety benefits including data-driven improvements and program adjustments. These adjustments will be in addition to the minimum required training through the Republic R-ATP Program.

This closed-loop program of monitoring a pilot's initial flight training all the way through to meeting those requirements necessary to pursue 14 CFR part 121 operations is equivalent or exceeds that of a pilot who receives flight training through the military.

5.1.2.1 Safety as demonstrated by LIFT pilots at Republic

LIFT Academy graduates perform well once at Republic, as shown by Republic's AQP data. Republic tracks and monitors several success and safety-related metrics of pilots during training and employment at Republic. Compared to non-LIFT graduates, LIFT Academy graduates tend to outperform their counterparts. Although data is not yet available from the Republic R-ATP Program, the LIFT graduate data is a testament to the success of LIFT Academy's training philosophy. LIFT trains pilots to the highest possible standards and equips them with the necessary skills to excel in their future careers as part 121 air carrier pilots.

The following section summarizes some of the metrics Republic currently tracks and compares LIFT performance with non-LIFT pilots. From June 2021 to March 2022, 31 LIFT graduates were registered with Republic Airways, 25 of whom have been released to the line while 6 are still in training. During the same period, 607 non-LIFT graduates were registered with Republic, 387 of those were released to the line while 220 remain in training. Below are several examples of metrics tracked below with supporting data analysis.

Completion of Initial Qualification
LIFT Academy graduates tend to complete IQ at a higher rate than graduates from other pilot training institutions. As illustrated in Figure 11 below, 96% of LIFT graduates successfully complete IQ, compared with 94% for non-LIFT graduates.

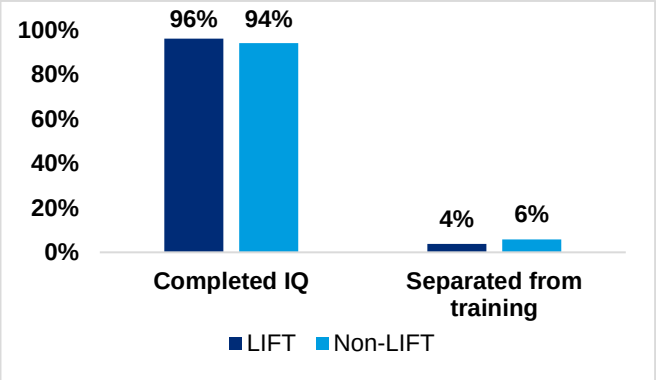

Figure 11: Pass and termination rates for LIFT and Non-LIFT graduates

Lesson completion rates

Graduates from LIFT Academy have a lesson completion rate that is 2% higher than non-LIFT graduates (see Figure 12 below). A lesson is considered complete when the pilot receives a rating of Complete or Satisfactory and is considered incomplete with a rating of Incomplete or Unsatisfactory.

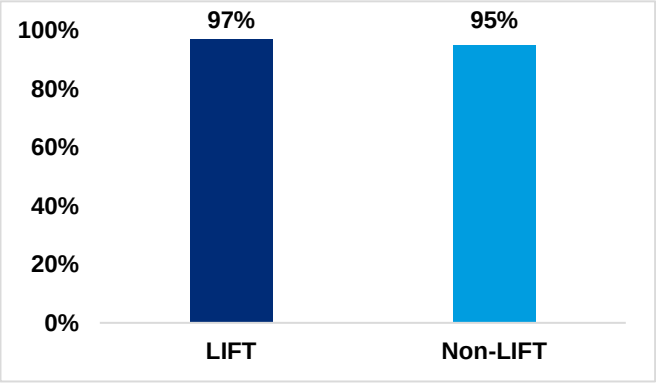

Figure 12: Lesson completion rate for LIFT vs. Non-LIFT graduates

Task retakes

Republic tracks the number of students who are placed in Supplemental Breakout Training ("SBT"). Students who have attempted a training task more than once due to an unsuccessful initial attempt are placed in SBT where they are provided addition training and support. As illustrated in Figure 13 below, LIFT graduates have a task retake rate of 45%, compared with 75% of non-LIFT graduates.

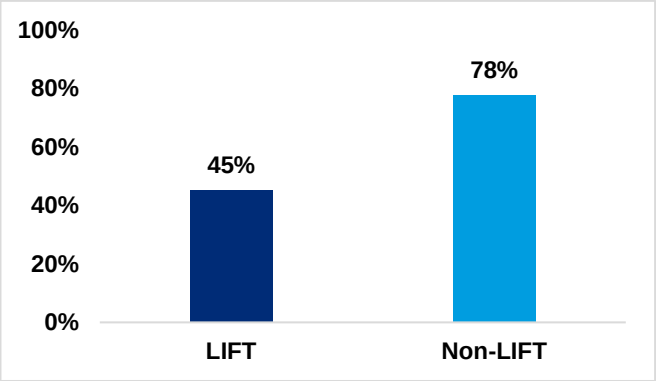

Figure 13: Task retake for LIFT vs. Non-LIFT graduates

* * *

When the Final Rule on Pilot Certification and Qualification Requirements for Air Carrier Operations was published in July 2013, the FAA emphasized "the importance of an aviation curriculum in permitting a reduction of hours. It is the significance of aviation coursework above and beyond what is required for pilot certification that is the primary basis for permitting a reduction in flight hours." 78 Fed. Reg. at 42352. As detailed above, the Republic R-ATP Program is fully consistent with that commentary – it provides significant rigorous, substantive coursework above and beyond the pilot certification requirements, with regular testing and gating items. It also goes well beyond the coursework of basic flight academies, and it closely resembles the military-based pathway training, for which the FAA did provide a reduced hours requirement in § 61.160(a).

For all of the reasons explained above in this Section, granting the requested exemption would not be adverse to safety and would arguably provide a higher level of safety to the military pathway provided in § 61.160(a).

6 Summary to Publish in the Federal Register

6.1 § 11.81(f) A summary we can publish in the Federal Register, stating: (1) The rule from which you seek the exemption; and (2) A brief description of the nature of the exemption you seek

Republic Airways is seeking an exemption from 14 CFR § 61.160(a), which allows current or former U.S. military pilots to apply for a restricted airline transport pilot certificate ("R-ATP") with a total of 750 hours. Specifically, Republic is asking that pilots who graduate from the rigorous closed-loop training program outlined are granted the ability to also apply for the R-ATP under part 61.160(a). The exemption would allow a safe and more diverse group of aviators to enter the industry by providing an additional opportunity for underserved communities and demographics.

7 Additional Information

7.1 § 11.81(g) Any additional information, views or arguments available to support your request

7.2 Republic R-ATP Implementation Plan

7.2.1 Small validation groups

Republic Airways has designed a "proof of concept" program to be executed with the goal of demonstrating that its proposed Republic R-ATP is feasible and can train pilots who are not just as qualified, but potentially more qualified than, their counterparts.

The small groups will consist of 2-6 students who will be selected to enroll in the Republic R-ATP program. Republic will select a diverse group of students, with differences in age, post-secondary experience, and demographic backgrounds. The students selected will be from

various states of training and will complete their flight training at the LIFT Academy with approximately 300 flight hours (e.g., new CFIs). The students will have performed up to the Republic R-ATP program standards throughout their part 141 and 61 flight training.

The selected students will begin Command Experience training and Advanced Airline Academics as early as July 2022. The students will continue through Specialized Advanced Airline Training (i.e., Command Crew Flying, and Republic Airways Introduction). Once the students build 750 total flight hours and receive the certificate of program completion, their data portfolio will be compared against performance of other 1,500 flight hour pilots. De-identified data analysis of the Republic R-ATP small group tryout(s) to highlight performance trending of those participating will be conducted and available for FAA review and input.

It is important to highlight that participation in this project is strictly voluntary for the students. As an incentive for those who wish to enroll, Republic will provide financial assistance in the form of a stipend that will cover the students' cost of living throughout the duration of the program.

7.2.2 FAA oversight

Throughout the duration of the small group tryout, it is expected that the FAA will have an oversight of all training and data. This includes but is not limited to training manuals, instructor led courses, and student performance data. During the process of the tryout the FAA would recommend appropriate changes and approve all training material associated with the program.

It is anticipated there will be 4 groups with a total of 16 candidates participating in the validation of the overall program. All 4 groups will have gone through each phase of the Program before full-time candidates reach any of the pathway gates.

7.3 Community Outreach Initiatives

Key initiatives from Republic and LIFT Academy's community outreach are described below:

Diversity conferences:
LIFT has participated in (and sponsored) several diversity conferences to increase awareness of pilot careers, including:

- National Gay Pilots Association ("NGPA") Conference[23] (Sponsor)
- Indiana Latino Education Summit and College & Career Fair[24] (Sponsor)
- Women in Aviation Conference[25]
    - LIFT offers a scholarship through Women in Aviation[26]
- Organization of Black Aerospace Professionals ("OBAP") Conference[27]

LIFT plans to increase its presence at conference in the coming years with participation at the following conferences:

- Professional Asian Pilot Association ("PAPA") Conference[28]

LIFT Off- Girls in Aviation Day Event[29]:
LIFT Off is annual event that LIFT Academy has hosted since 2019. The goal of this event is to encourage and inspire young girls to consider a career in the aviation industry.

LIFT Academy Summer Fly By Camp[30]:
The LIFT Academy Summer Fly By Camp is an annual one day summer camp hosted at LIFT's Indianapolis hangar. This event is aimed at showing middle school age students the exciting career opportunities available in the aviation industry.

The LIFT Lab:
The LIFT Lab is a custom-built mobile virtual reality ("VR") simulator experience. Inside, there are four VR stations where individuals can take a virtual reality flight in a DA42 aircraft over Lake Tahoe. This is a unique opportunity for students to experience the feeling of being a pilot, and to picture themselves in an airline pilot career. The LIFT lab has the capacity to provide VR pilot experience to up to 380 students a day.

High Schools:

Republic prefers students with some post-secondary education for the R-ATP program. However, Republic also accepts students after completing high school. LIFT has a presence in

[23] **NGPA:** *Winter warm-up*. NGPA. (n.d.). Retrieved February 14, 2022, from https://www.ngpa.org/winter_warm_up?locale=en_us
[24] **Indiana Latino Education Summit**: Indiana Latino Institute. (n.d.). Retrieved February 14, 2022, from http://indianalatinoinstitute.org/upcomingevents/indiana-latino-education-summit/
[25] **WAI conferences:** Women in aviation international. WAI. (n.d.). Retrieved February 14, 2022, from https://www.wai.org/conference
[26] **Lift Academy: Women in Aviation Scholarship:** Women in Aviation International. WAI. (n.d.). Retrieved February 14, 2022, from https://www.wai.org/education/scholarships/2022/lift-academy-women-aviation-scholarship
[27] **OBAP conference**: Organization For Black Aerospace Professionals. (2022, January 6). Retrieved February 14, 2022, from https://obap.org/annual-conference/
[28] **PAPA conference**: (n.d.). Retrieved February 14, 2022, from https://www.asianpilots.org/
[29] **LIFT off**. LIFT Academy. (2021, September 7). Retrieved February 14, 2022, from https://flywithlift.com/lift-off-2021/
[30] **LIFT fly by summer camp**: LIFT Academy. (2021, September 7). Retrieved February 14, 2022, from https://flywithlift.com/lift-fly-by/

high schools to help generate interest in aviation careers. LIFT attends college/career fairs, presenting to classes, and bringing the LIFT Lab mobile simulator truck to schools and events.

High school partnership: LIFT Academy has a partnership with a local high school, Traders Point Christian School ("TPCS"). This collaboration will make TPCS the first school in Indiana to offer a four-year aviation program for high school students by taking the Aircraft Owners and Pilot Association ("AOPA") Aviation STEM curriculum and preparing the students to fly at LIFT. LIFT and TPCS have built a dedicated space called the LIFT Aviation Exploration Center, which includes a Gleim Virtual Cockpit Flight Simulator. Additionally, students in the Aviation STEM program will receive 40 hours in the LIFT Diamond aircraft with a CFI throughout the 4 years they are in the program. This "classroom to cockpit" experience provides TPCS students exposure to an aviation career as early as possible with close integration to the airline readiness program that is uniquely offered at LIFT Academy.

Teacher and counselor awareness: School counselors are usually the first point of contact when LIFT reaches out to high schools. Therefore, it is important that teachers and counselors are aware of LIFT's program and the opportunities it could provide for students. In addition to scheduling meetings with school counselors and teachers to share program information, LIFT also attends education conferences and events, including:

- Hoosiers Association of Science Teachers, Inc. (HASTI) Annual Conference[31]
- American School Counselor Association (ASCA) Conference[32]
- Indiana School Counselor Association (ISCA) Conference[33]
- Project Lead the Way (PLTW) Summit[34]
- AOPA Stem Symposium[35]

STEM / Aviation classes and organizations: In addition to the high school initiatives described above, LIFT visits high schools with aviation classes and/or clubs or groups that focus on STEM or aviation. LIFT's outreach includes inviting these groups to visit the LIFT hangar, presenting the LIFT program to the classes, or bringing the LIFT lab to the classes. In addition, LIFT invites these groups to join events such as the LIFT Academy Fly By summer camp, open houses, and Girls in Aviation Day. Examples of these STEM / aviation groups include:

- Civil Air Patrol [36]
- The U.S. Army Junior Reserve Officers' Training Corps ("JROTC")[37]

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[31] **HASTI Conference**: Hoosier Association of Science Teachers, Inc. - 2022 HASTI Program Proposals. (n.d.). Retrieved February 14, 2022, from https://www.hasti.org/event-4320336
[32] **ASCA 2022**: Asca conferences. Home. (n.d.). Retrieved February 15, 2022, from https://ascaconferences.org/
[33] **ISCA**: Indiana School Counselor Association - Home. (n.d.). Retrieved February 15, 2022, from https://isca.wildapricot.org/
[34] **PLTW**: PLTW Summit. Project Lead The Way. (n.d.). Retrieved February 15, 2022, from https://pltw.umbc.edu/pltw-summit/
[35] **Aopa High School Aviation Stem Symposium:** AOPA High School Aviation STEM Symposium - You Can Fly. (2020, February 4). Retrieved February 15, 2022, from https://youcanfly.aopa.org/high-school/symposium
[36] **Civil Air Patrol**: Civil Air Patrol National Headquarters. (n.d.). Retrieved February 15, 2022, from https://www.gocivilairpatrol.com/
[37] **JROTC**:. JROTC Overview. (n.d.). Retrieved February 15, 2022, from http://www.usarmyjrotc.com/general/program_overview.php#:~:text=JROTC%20curriculum%20includes%20lessons%20in,relevant%20to%2021st%20century%20education.

- STEM goes red[38]
- Project Lead The Way ("PLTW") Classes[39]

Aviation Events:
LIFT attends various aviation focused events throughout the year to recruit and raise awareness of careers in aviation. LIFT has attended larger and smaller local aviation events and airshows, including:

- Northwest Aviation Conference[40]
- Sun n Fun Airshow[41]
- Experimental Aircraft Association ("EAA") Air Venture[42]
- Reno STIHL Air Races[43]
- University Aviation Association ("UAA") Conference[44]
- Flight Sim Expo[45]

National outreach:
LIFT recognizes that there are talented individuals across the United States that are eager to pursue a career path in aviation, and therefore has supported recruitment initiatives across the country. LIFT has a focus in the local Indiana area, but also travels to states including Kentucky, Ohio, Texas, Florida, Illinois, Michigan, North Carolina, and Georgia.

AeroStar Consulting – Aviation Talent Pipeline Career Technical Education (CTE) program
Republic Airways has contracted Aerostar Consulting to develop Integrated Support Services Workshops. Through AeroStars Talent Pipeline strategic planning or any component thereof, it is our goal to maintain an interim- advisory and consultant relationships with the school. AeroStar will provide training workshops to students, staff and Republic Airways training affiliates on topics ranging from in-the-classroom STEM practical applications and supplemental aviation curriculum content to administrators and instructors in order to reinforce applied sciences in the real world and create interest for the Ivy Tech Aviation CTE Program(s). Cultural Sensitivity Training and Diversity, Equity and Inclusion will also be offered to foster persistence in the success of underrepresented populations into the aviation industry through this program.

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[38] Stem goes red – sponsors for this conference -- https://www.goredforwomen.org/en/get-involved/attend/stem-goes-red
[39] **PLTW engineering curriculum**: PLTW. (n.d.). Retrieved February 15, 2022, from https://www.pltw.org/our-programs/pltw-engineering-curriculum
[40] **2022 NW aviation conference**: 2022 Northwest Conference and Trade Show, February 26/27 Puyallup WA. (n.d.). Retrieved February 15, 2022, from http://washington-aviation.org/NACoverview.html
[41] **SUN 'n FUN Aerospace Expo**: (2022, February 14). Retrieved February 15, 2022, from https://flysnf.org/
[42] **EAA AirVenture oshkosh**: Oshkosh, Wisconsin: Fly-in & convention. EAA. (n.d.). Retrieved February 15, 2022, from https://www.eaa.org/airventure
[43] **STHL National Championship Air Races**: Reno Air Races. (2021, December 1). Retrieved February 15, 2022, from https://airrace.org/
[44] **UAA 2021 conference**: 2021 Conference - University Aviation Association. (n.d.). Retrieved February 15, 2022, from https://www.uaa.aero/2021_conference.php
[45] **FlightSimExpo 2021**: (n.d.). Retrieved February 15, 2022, from https://www.flightsimexpo.com/

7.4 Public industry documents

We are providing internet links to two public documents that the FAA has on file. These documents are from committees established by the FAA, The ACT ARC Charter calls for, "The FAA must continue to review existing air carrier training and qualification regulations, policies, and guidance to ensure they are current and relevant. In addition, the FAA continues to identify new challenges with changing technology and new research that may necessitate the development of new regulations, policies and guidance." We believe these documents show industry support for the type of program we will establish under our requested exemption.

Air Carrier Training Aviation Rulemaking Committee (ACT ARC) Recommendation 16-8

Link to report - https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/avs/ACT_ARC_Reco_16-8.pdf

First Officer Qualification Aviation Rulemaking Committee Report

Link to report - https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/FOQARC-7162010.pdf

8 Exercising the privileges of the exemption outside the US

8.1 § 11.81(h) If you want to exercise the privileges of your exemption outside the United States, the reason why you need to do so.

All of the activities, training, and teaching under the Republic R-ATP Program will be provided in the United States. Pilots who successfully complete the rigorous Program and receive the Republic R-ATP will act as first officer crew members on Republic domestic commercial air services within in the U.S. and may be assigned to commercial air services to and from international destinations allowed by our Operations Specifications.