



Part 141- Recommendations for Modernization

a. Review part 141 and provide recommendations that would support the current and future needs of pilot training. The stakeholders will have the capability to be innovative and original in recommendations for an advanced and modern part 141 that anticipates future needs of part 141 pilot schools.

b. Identify recommendations related to the requirements to obtain and maintain a part 141 pilot school air agency certificate.

We believe that the 'entry' requirements to obtain a Part 141 certificate need significant modernization. The current process relies more on a bureaucratic record keeping drill than a competency/ performance-based system that better measures the quality of the school's management and instructor cadre versus how many students have passed a check ride in a system where the individual variability of the DPE's expectations vary from FSDO to FSDO. Specifically, we believe that an effective examination of how the school will function under the applicable regulations, and an in-depth assessment of the examination abilities of the Chief Instructors and Check Instructors as well as the instructional ability of the line instructor should be the primary, if not sole, criteria for a Part 141 certificate. Not only do we feel strongly about these core competencies for entry to Part 141 certification but feel that when properly implemented and executed it should result in examining authority being authorized with the initial part 141 certificate.

c. Discuss and provide recommendations for better utilization of examining authority under part 141. Consider how examining authority may be enhanced through eligibility requirements, training of personnel, and FAA oversight.

As mentioned above, we believe that examining authority should be synonymous with Part 141 certification. As such, we believe that it is essential that the quality of leadership and technical ability should be key metrics for not only being eligible for a Part 141 certificate, but maintaining it on an ongoing basis. Focusing on pass rates or other metrics of the student only are not effective benchmarks for the quality of the school, it's leadership or instructor corps. The quality of the student graduating is a direct correlation to the quality of the instruction received. Spending too much time strictly on a narrow pass rate metric, for entry or maintenance of a Part 141 certificate, is unlikely to be of value when determining the quality of the certificate holder or it's leadership team. Only direct contact, mentoring and assessment with the school's leadership team to ensure the quality of instruction will be what determines the effective and timely production of new pilots.

The FAA's role should be to:

-streamline the process and provide clear direction and guidance on the requirements for a Part 141 certificate.

-ensure the process is uniform across all FSDOs and POIs, it would be nice to have the 'S' in FSDO to mean standards.

-create a central office where Part 141 certificates are authorized and maintained. Future, modernized 141 operations will be considerably more data driven and based on competency-based, scenario-based and/or performance-based teaching, learning and examination methods. Because of this, there needs to be a central office where the data is collected, analyzed and used for continuous improvement of the Part 141 process, just as it has been with recent risk and performance based regulatory processes.

d. Discuss, define, and provide recommendations for what a 'modern' pilot training and certification system should model to meet the needs of the pilot training industry.

As with many of our modernized regulatory approaches, future training regulations and certification needs to move from strictly a prescriptive, one size fits all model to one which allows the operator to

design and implement competency or performance-based systems. Let us be clear, this is not advocating for a free for all system where everyone can do what they want, but rather an ability to design training programs based on the assets available in a data driven approach to meet the applicable standards for certification of pilots.

Our newest safety systems use this data driven approach to best identify and reduce risks. This template is applicable in the training environment as well. As mentioned above, however, it is essential that the authorization and oversight of this approach comes from a central office where standards and a consistent message can be applied.

e. Discuss and provide recommendations on the integration of emerging technology into a modern part 141 training and certification system. Emerging technology could include but is not limited to, electric propulsion, advanced air mobility, simplified flight controls, advanced simulation (virtual and mixed), electronic flight bag (EFB), electronic record keeping, advanced avionics such as an angle of attack indicator, advanced weather products and delivery, and remote training.

Any and virtually all emerging technologies must be considered for use in a modernized part 141 training and certification system. It will, however, be critical that these new technologies come with their adequate training programs as they are melded into the larger program and have a direct and proven application to the training environment. As with everything, training is paramount and clear and understandable objectives of the use of new technologies must be understood by all. While it is important to introduce new technology, it should be offered as an option, not be required. If an organization doesn't want to do eVTOL, that shouldn't affect their Part 141 status.

f. Develop recommendations on teaching, learning, and examination methods (e.g., competency-based, scenario-based, performance-based, and other flexible considerations) that could be better utilized within the part 141 training environment.

Part of this process needs to be a good look at the value of certain flight simulator or training devices. Many of these products provide a very realistic and valuable resource, particularly for an instrument training. As these devices are validated for use in a training program, there needs to be a realistic, data driven review of how much of that sim/trainer time can be used against the total requirements for a certificate or rating. In this review it will be important for the authorizing office to measure the ability of the training device to provide realistic training and performance as compared to actual flying. As data is collected and compared, there needs to be an evaluation of how much training device experience can replace actual flying time.

g. Discuss and provide recommendations on how to capture data from part 141 pilot schools to determine the quality of training. As part of this task, consider how the data can be utilized to amend training courses to correct for identified safety issues or to enhance training. The stakeholders may offer solutions for continuous improvement of pilot training, including by sharing training data with the FAA and others within the training industry to foster a cooperative relationship with the FAA and to support the training industry as a whole.

We believe the Safety Management System (SMS) Safety Assurance Process provides a good template on how to take collected data, identify deficiencies (hazards) to assess the potential training problems (assess risk), and then modify or develop methods to improve training (mitigate risk). In an ongoing, continuous process the quality of the training program/ environment would be continuously evaluated in a data driven approach.

h. Determine the challenges part 61 training providers face and the reservations they may have to provide training under part 141. The stakeholders may make recommendations to maximize the full potential of part 141 to meet increased demand for pilot training.

The primary challenge a Part 61 school has in looking to becoming a Part 141 school is the process to complete what is primarily a paperwork driven approach. If the desire is to move more schools into part 141, the process needs to include mentoring from a central FAA office on all the needs to achieve a Part 141 certificate. Specifically, ensuring the new school is aware and capable of the need for a data driven approach, is capable of monitoring the effectiveness of the process and has the management/ instructor corps to execute the different approach.

i. Discuss and provide recommendations to encourage current part 61 training providers to become certificated pilot schools in the more structured part 141 environment, which offers lower flight time requirements for pilot certificates and ratings.

Encouragement to move to Part 141 will be primarily driven by a new approach to achieving certification. Having a clear process, universally applied with the mentorship of both the FAA and industry will go a long way to encouraging new schools to pursue Part 141 certification. Having a clear, well defined and achievable path to Part 141 certification, that includes examination authority will be the biggest incentive for schools to participate.

j. Develop recommendations to create opportunities and/or a program for industry stakeholders to mentor part 61 training providers, with the goal of helping the part 141 training community continue to provide a safe and robust training environment for all students.

Once again, the SMS “journey” provides a useful template to benchmark. As SMS was being developed, there were multiple industry meeting and seminars to gather a wider industry perspective, all driven by the recommendations of subject matter experts. A similar process occurred when moving from a prescriptive approach to Flight and Duty Time regulations to a data driven approach with Fatigue Risk Management Systems (FRMS). Out of these processes, there became a network of operators who created multiple opportunities to “crosstalk” issues, some sponsored/hosted by the FAA and others by the industry.

k. Provide recommendations for training and operational requirements that recognize and mitigate risk to promote a safety mindset in part 141 personnel and students to reduce the overall fatal accident rate. Consider the implementation of a safety management system (SMS) within part 141 pilot schools.

Development and implementation of a SMS for a Part 141 school is essential to mitigate risk a promote a safety culture and mindset. If the desire is to provide the highest quality pilot that may, in the future, enter a professional flying career, having exposure to and experience within a SMS is essential to preparing the new pilot for the future.

l. Discuss and provide recommendations on incorporating a Quality Assurance System, as outlined in International Civil Aviation Organization (ICAO) Annex 1, Appendix 2, Item 4, into part 141 pilot school requirements.

As mentioned above, a Quality Assurance System will be required when moving to a data driven approach.