



PART 147 TECHNICAL TRAININGS, CHALLENGES AND SOLUTIONS DURING THE TIMES OF UNCERTAINTY

News / Maintenance / Trainings



As the aviation industry is currently going through the COVID-19 crisis and class courses are being stopped or rescheduled, all of the Part 147 training schools are facing major existential challenges. Due to the limitations applied during the times of quarantine (including but not limited to closed possibilities to travel and bans on holding the meetings), technical trainings are being closed and/or postponed for the indefinite period of time.

Below, we explore the pros and cons as well as the solutions that the whole aviation industry (airlines, MROs and others) and regulators should be considering in these turbulent times.

1. Part 147 online trainings

Naturally, this is the first solution that comes to mind as it provides a convenient and cost-effective way of training the team. Due to the nature of online trainings, they overcome COVID-19

challenges mentioned above rather well – they allow you to avoid physical meetings while mobile technologies open the doors to any part of the world.

The most important limitation of online trainings is that they cover only specific parts of aviation competences. Moreover, depending on the type of the provider selected, the solutions offered are more or less interactive; therefore, the actual knowledge sharing is limited to the personal willingness to study and access the materials presented online.

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- Cost-effective
- Limited scope of training types
- Accessible worldwide
- Limited interaction
- Flexible
- Non-controlled environment
- Does not require physical interactions

1. Virtual trainings

The topic, which is now very relevant inside the Part 147 society, is virtual trainings. They are more advanced comparing to the classical online trainings, as it is based on an interactive method providing the training with the instructor of the course gathering the group of students in a virtual environment (e.g., Zoom, Teams, Skype or any other). From the regulatory point of view, such an option offers a higher level of interaction, control and knowledge sharing.

Yet is this a “silver bullet” to the COVID-19 challenge? Unfortunately, not, and mainly because of the regulatory requirements related to (i) examinations and (ii) practical part of the trainings.

EASA as well as other regulators across the globe were always very strict to ensuring the controlled environment of the training process (with the key focus on exams) as well as practical part of trainings (aiming that some part of the training would be done with the physical access to the aircraft).

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- Potentially full scope of trainings
- Limited to regulatory restrictions (exams/practical part of trainings):
- Extended interaction via virtual meeting tools
- Only partially-controlled environment

- Flexible
- Can only guarantee virtual access to aircraft/ component
- Does not require physical interactions
- *Going the extra mile for regulators is essential during the times of uncertainty*

Unfortunately, aviation industry by itself would not be able to overcome the above-mentioned regulatory challenges without regulators going the extra mile, which now is critically important.

Our thoughts and suggestions are explored below:

- **Physical vs. virtual access to aircraft**

Virtual reality is another topic roaming in the corridors of aviation world and even if we are living in a 21st century with almost everything being virtual, the conservative nature of aviation is looking cautiously at virtual equipment created. However, it does seem that we have a path to breakthrough and the regulatory voice is softening due to the numerous scientific research proving that virtual trainings can fully replace physical ones. Nevertheless, they can be even more effective and provide unlimited possibilities for repeating difficult tasks, avoiding simulating errors and creating an environment that would be very rare in the real world.

The transfer of full training programs to the virtual reality would have to be done anyway yet would require time and investment from the industry, therefore carrying it out now is more convenient. It also ensures the continuous learning process of the aviation professionals as well as safety now and in case of like future events.

- **Maintaining the controlled environment virtually**

Maintaining the controlled environment virtually is the second challenge. However, this is a smaller one and requires (i) less investment and (ii) mainly the political will from the regulator.

It is important to note that examination process can be controlled virtually (e.g., via camera) according to clearly described rules on how the students should behave during the examination process (no disturbance, no unnecessary movement, etc.)

To sum up:

- The existential crisis that Part 147 world faces cannot be solved by private initiative alone without the support of the regulators.
- Online and virtual tools are implemented to solve the basic needs for the continuous training and, thus, basic aviation safety means, but are limited due to the regulatory restrictions.
- Assistance and flexibility from the regulators is key during this period to make sure the survival of technical trainings as well as aviation industry overall. Yet even if changes discussed above can be ascribed to the periods of crises, the implementation of new conditions permanently could open the doors to the new and more competitive aviation environment!

FL Technics is a global provider of aircraft maintenance, repair and overhaul (MRO) services and the founder of a global Part 147 technical training centre.

Part-66 Section A

66.A.20 Privileges

Definition of Simple test i.a.w. GM 66.A.20(a)1

Described in approved maintenance data and meeting all the following criteria:

Using aircraft controls, switches, Built-in Test Equipment (BITE), Central Maintenance Computer (CMC) or external test equipment not involving special training.

-The outcome of the test is a unique **go – no go** indication or parameter, which can be a single value or a value within an interval tolerance.
No interpretation of the test result or interdependence of different values is allowed.



Certifying staff



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