

02/06/20	08/10/20			
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CYLINDER TESTING AND REQUALIFICATION
 DOT CFR49 HAZMAT TRAINING – MEETING CFR49 172.700

(ADR training also available)

DISTANCE LEARNING INSTRUCTOR LED TRAINING (ILT)
NEW APPROACH - SAME HIGH QUALITY LEARNING!



New approaches by CAA and EASA allow the benefit of distance learning training - a completely viable alternative to face-to-face training. Best practice for remote education focuses on delivery of the curriculum. Content is the same. This presupposes clarity about the syllabus is in a systematic program IAW CFR49 subpart H requirements.

- Assisted learning methodologies combining learning via synchronous teaching and asynchronous assignments.
- STILL provided by the most experienced and highest qualified DOT CFR49 instructor in the world.
- IDENTICAL close relationship of dialogue and learning.
- THE SAME comprehensive and highly regarded manuals and documentation. Comprehensively revised for task guidance and knowledge assessments to meet the more robust approach needed for remote training

DISTANCE LEARNING BENEFITS

- Greater flexibility - synchronous and asynchronous (offline) learning allows guided assignments to suit workload.
- Staff can train from home - allowed under some furlough arrangements - makes return to work more productive.
- Follows EASA AMC 147.A.130(a) Distance Learning Guidance and CAP 1933 methodologies. See Annexes.

	Classic face-to face training	Distance learning
Methodology	Teacher lectures the pupils in a classroom/workshop	Multimedia based via ZOOM (preferred media platform)
Itinerary	Fixed 4 to 6 days, 7 hour per day schedule	Flexible hours giving your workforce the ability to mix productivity and learning . We recommend 5 hours per day to fit your schedule. Can be spread over more than one week.
Presentation	Classroom and workshop.	Content streamlined for in class and in workshop work. Training materials provided in advance.
Set up	Technology rehearsal gives seamless student experience and identifies training delivery risks	Can be set up and tested in advance. Start immediately on day 1.
Costing	Reduced cost	No travel cost. Staff can continue to work flexibly and earn income.
Content	CFR49 including part 107. 171, 173, 178, 180 and meets the requirements of CFR49 172.700 including General Awareness, Function Specific, Safety and Security (via DOT weblink).	
Competency	Distance learning provided since early 2020. Courses rewritten and reprovisioned. Instructor seminars and learning courses completed, focussing on a single platform to maximise learning curve.	

Testimonials

15/05/2020

Thank you for your accommodation, assistance and flexibility in delivering this training course under the difficult circumstances caused by the Covid 19 virus. It has been a safe method of delivery and the feedback that I have received has been very positive. Participants indicated that they were happy with the training standard and the delivery method. It seems that you're in depth experience, practical and positive personality comes through no matter which method of deliver you use for the training. Therefore, I thank you for the considerable effort that you put in to making the training course happen and also making it interesting for the trainees. TEAM Accessories was very happy to be the first company to have received this method of training from Bancroft.

25/05/2020

As you know, I personally took the course with Austin & Paul and all three of us were of the view that the course went well. There were small technical difficulties regarding sound from us to you, which we could work on improving next time. All in all this format could be considered as a replacement going forward and I think our dealings in the past certainly helped to make things run so smoothly.

Annexe 1 – remote training analysis using Part 147 Distance Learning Guidance

Applies to organisations seeking new approval as well as existing approval holders

Part 147 guidance	Bancroft training	Bancroft Provision
Submit details of proposed changes to existing training methods.	Documentation and training materials provided to allow submission if required.	Y
Training must not be asynchronous and must be interactive.	ILT training is synchronous/interactive supplemented by guided asynchronous tasks and self-study .	Y
Acceptable application – ZOOM.	ZOOM used.	Y
Validation of student ability to understand, read and write in English.	Training application form clarifies and requests competence level to be confirmed.	Y
Maximum capacity 20.	Typical courses are 5 to 8 persons.	Y
Maximum 6 training hours per day with regular break periods.	Feedback received indicates a reduced training day of 4 to 5 hours is more practical for instructors and delegates. 6-hour target with regular breaks has proven successful .	Y
Student / Instructor interaction includes verification of student understanding .	Interactive questions and knowledge checks after every module final exam and one-to-on assessment and mentoring session.	Y
Potential time zone difference considered.	Training sessions can be set to any time to suit candidate requirements and times.	Y
Organisations to maintain records of training delivery, student attendance, hours of tuition per day.	Daily itinerary provided as standard detailing actual hours spent on each topic.	Y

<https://www.easa.europa.eu/sites/default/files/dfu/Annex%20IV%20%E2%80%94%20AMC%20and%20GM%20to%20Part-147%20%E2%80%94%20Issue%202%2C%20Amendment%202.pdf>

https://www.caa.co.uk/Commercial-industry/Aircraft/Airworthiness/Approval-information-and-guidance/Part-147-holders-guidance/?mc_cid=b4077389b4&mc_eid=46f53b05f0

Annexe 2 AMC 147.A.130(a) Training procedures and quality system

Acceptable Means of Compliance analysis

<https://www.easa.europa.eu/sites/default/files/dfu/Annex%20IV%20%E2%80%94%20AMC%20and%20GM%20to%20Part-147%20%E2%80%94%20Issue%202%2C%20Amendment%202.pdf>

Training Tools	Description	Bancroft provision
Slideshow.	Structured presentation.	Y
Manuals .	Comprehensive and controlled publication of a particular topic.	Y
Media and devices.	Adaptable to a wide range of recipient devices including PC's, phones, projectors and tablets.	Y
Virtual Classroom.	Simulated locations adaptable and allow synchronous learning experience.	Y

CAP 1933 Guidance for use of Web based training, Distance Learning, Simulation and Virtual Reality

<http://publicapps.caa.co.uk/docs/33/CAP1933%20Distance%20Learning%20&%20Virtual%20Reality%20Guidance.pdf>

Training Tools	Description	Bancroft provision
Platforms	Examples include Skype For Business, Microsoft Teams, GoTo Meeting, Zoom. Zoom preferred method used by Bancroft	Y
Manuals .	Comprehensive and controlled publication of a particular topic.	Y
Media and devices.	Adaptable to a wide range of recipient devices including PC's, phones, projectors and tablets.	Y
Delivery	Participants should be able to fully interact with their Instructor, via audio and visual methods	Y
Maximin numbers	28 max recommended – Bancroft courses typically 3 to 15	Y
Quality oversight	Quality representatives are encouraged to participate	Y
Training Needs Analysis required	Conducted before commencement	Y

CAP 1933 Checklist

1. Which communication medium are you using? Skype / ZOOM / etc.	Zoom.
2. Have you tried any other mediums and what influenced your decision?	Yes, GoToMeeting, teams. Zoom has better ease of use and features including screen share and tech control.
3. What will the maximum class size be? - how have you validated this as satisfactory?	Typically 4 operators 1 manager max. Additional management accommodated - not usual examined.
4. How do you implement student monitoring?	Assignment deliverables, team Q and A sessions.
5. <i>How is the requirement for access to aircraft or components catered for?</i>	n/a.
6. Digital alternatives planned Student visits, etc?	Option of site visit at a later time.
7. How is the virtual classroom designed, standardised and maintained? e.g. the image / stage that the Student physically sees on the screen.	Setup rehearsal to ensure virtual environment meets TNA.
8. Student attendance – how is this monitored during the entire lesson?	TNA item 9 (ii).
9. Have the original course TNAs been altered?	No .
10. How is the training material accessed by the Student?	Training packs delivered n advance. Course specific changes can be emailed/shared live.
11. How will students be able to access the MTO's library? - Will there be access during out of tuition periods?	Training packs, offline asynchronous learning assignments prepared.
12. What is the minimum standard for the Student's IT equipment? Camera, Broadband speed, Hard drive capacity, etc.	3G or 4G/LTE. 1:1 video calling: 600kbps (down) - high-quality video 1.2Mbps (down) . Screen sharing only (no video thumbnail): 50-75kbps (down). Screen sharing with video thumbnail: 50-150kbps (down).
13. What additional training have the Instructors undertaken? Bespoke course, etc	Webinars, UKAS remote assessment courses. Trained Trainer. 2 + years experience and an educator
14. Will you be planning to deliver any asynchronous content? – will this be a pre-recorded lesson, as opposed to a live Instruction	Yes, via monitored/deliverable assignments. No pre-recorded content.
15. How will the standard of engagement between the Student / Instructor interactions be maintained?	Documented package logging modules, times and knowledge checks.
16. Student identification – how is this established, especially for remote type training where you may not have met the Student?	Pre course name identification, individually named/licenced training materials. Classroom introductions. Name cards visible.
17. Student engagement – how will a student ask a question or engage directly with the Instructor?	Live interaction – TNA and technical rehearsal checks audio/video feeds.
18. How is the Instructor engagement and mentoring being achieved?	One to One assessments
19. What has been put in place to ensure that the Instructor will be able to assess student/s cognition and understanding?	One to One assessments written exams, specification specific check-sheets individually marked
20. How is Quality Oversight conducted and how does the Competent Authority access the training?	Quality representatives encouraged to participate. Comprehensive documentation before and after completion.
21. <i>What are the proposals for aircraft visits / practical training? - how will they be conducted and by who?</i>	N/A.
22. What provisions are in place for typical component demonstrations etc?	Video examination and additional instructional slides
23. What is the Organisations provision for examinations? how will the final exam to be conducted and where?	Adjudicated via live feed with locally nominated adjudicator to ensure no copying or plagiarism
24. Following an exam failure, how will re-training be conducted?	Individual development plan, second exams available
25. With respect to Examination security has a risk analysis been carried out?	See 23

For full benefit, participants need

- Full video conference facility
- Attendees need an individual Zoom connection, for single access
- Training room requires good quality microphone – we can provide a camera and microphone with training materials
- Camera setup so instructor can see all students to assist with feedback and questions
- Second camera recommended for practical assessments
- Receiving student should have a robust computer / network system to receive information and communicate with the instructor and be in an area conducive to online training with minimal disturbances. See bandwidth recommendation above