

# Cabin Crew Training CATALOG

## Contents

Common Features .....	p. 2
EMERGENCY EVACUATION .....	p. 3
VIRTUAL DOOR OPERATION .....	p. 4
PRE-FLIGHT CHECKS .....	p. 5
FIRE FIGHTING .....	p. 6
CABIN FAMILIARIZATION .....	p. 7
CUSTOMER SERVICE .....	p. 8
BASIC LIFE SUPPORT DEFIBRILLATION .....	p. 9
Hardware & Customizations .....	p.10



## Common Features

AVIETRA's cabin crew training applications offer innovative 3D experiential scenarios that increase user engagement and knowledge retention.

### All our applications offer the following features:

- ▶ Vivid experience of highly realistic and interactive training scenarios in navigable virtual aircrafts
- ▶ Interactive tutorial that lets users familiarize with VR controllers
- ▶ Easy-to use interface that enables airlines and aviation schools to start benefiting from VR immediately
- ▶ Learning by example with virtual instructor guidance
- ▶ Learning by doing with first-hand try-out of procedures
- ▶ Real-time audio and visual feedback on user's actions
- ▶ Available for VR headsets as well as tablets, smartphones and PCs
- ▶ Fully customizable to meet any client need
- ▶ Firmly grounded on international [scientific studies about learning and retention](#)





## EMERGENCY EVACUATION

### AVAILABLE MODULES:

- ▶ Evacuation on Land
- ▶ Evacuation on Water

ICAO Cabin Crew Safety Training Manual (Chapter 5) describes the Aircraft Evacuation task in cabin crew training. To support effective learning of this task, the AVIETRA Emergency Evacuation application provides interactive virtual experiences for land and water evacuation that include door opening and crowd control.

The application offers three types of learning experience:

**Procedure presentation:** an animated virtual instructor provides spoken and visual instructions on how to operate a floor-level door and control the crowd during the evacuation.

**Procedure try-out with virtual instructor:** the user tries to perform the correct door opening and crowd control procedure in an empty aircraft while the virtual instructor monitors their actions and provides feedback.

**Procedure try-out in emergency condition:** the user tries to perform the correct door opening and crowd control procedure in an emergency with realistic simulation of the consequences of their actions. A debriefing at the end of the procedure provides the user with an evaluation of their actions.





## VIRTUAL DOOR OPERATION

ICAO Cabin Crew Safety Training Manual (Chapters 4 and 5) identifies door operation tasks that have to be performed in normal, abnormal or emergency situations. To support effective learning of these tasks, the AVIETRA Virtual Door Operation application provides interactive virtual experiences of a large and comprehensive set of aircraft door operation scenarios.

In all scenarios, the user is immersed in a virtual aircraft without passengers and must perform the correct sequence of actions to complete the required door operation procedure while the application provides feedback. After completing a procedure, the user receives a final debriefing about their actions, errors, omissions, and time taken.

The application includes a scenario configurator that allows users to choose among predefined door operation scenarios (door arming / disarming / opening / closing) or select configuration options (door status / arming status / external environment / external conditions / problems and malfunctions) that create several additional scenarios.





## PRE-FLIGHT CHECKS

### AVAILABLE MODULES:

- ▶ Equipment Checks
- ▶ Galley Checks
- ▶ Cabin Checks
- ▶ Security Checks

ICAO Cabin Crew Safety Training Manual (Chapters 4 and 5) identifies pre-flight checks tasks that cabin crew must perform. To support effective learning of these tasks, the AVIETRA Pre-Flight Checks application provides interactive virtual experiences through four different modules.

**Equipment Checks:** inspection and verification of the aircraft's emergency equipment.

**Galley Checks:** securing of galley equipment, e.g. latching equipment, turning off electrical appliances.

**Cabin Checks:** securing of the cabin, e.g. passengers with seatbelts fastened, window blinds up, and overhead bins closed.

**Security Checks:** ensuring areas like galleys, lavatories, and remote zones are free from foreign objects or suspicious items.

Each module guides users through key tasks, with a final debriefing on any errors or omissions.





## FIREFIGHTING

ICAO Cabin Crew Safety Training Manual (Chapter 5) describes the Firefighting knowledge and tasks in cabin crew training. To support effective learning of these tasks, the AVIETRA Firefighting application provides a set of interactive scenarios that allow the user to recognize different types of fire and perform extinguishing procedures in an aircraft.

The application offers three types of learning experience:

**Fire recognition:** the virtual instructor provides spoken instructions on how to recognize Class A, B, C, and D fires. Then, the user tries to recognize the different types of fire, while the virtual instructor provides feedback.

**Procedure try-out:** the virtual instructor provides the user with step-by-step guidance through the specific procedures to extinguish fires in six different scenarios set in the galley, cabin, and lavatory areas.

**Procedure practice:** the user tries to perform the correct extinguishing procedure in the available scenarios without step-by-step guidance from the virtual instructor. If the user makes errors, the application provides feedback about the error and the correct action to perform.





## CABIN FAMILIARIZATION

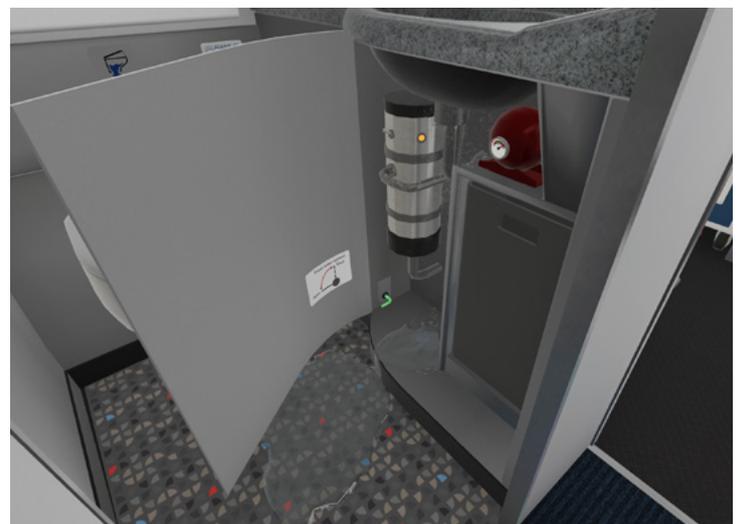
The AVIETRA Cabin Familiarization application includes interactive scenarios that allow the user to familiarize with the different equipment and systems of the cabin and perform related tasks.

The application offers three types of learning experience:

**Equipment and systems recognition:** an animated virtual instructor provides spoken instructions on how to recognize the different equipment and systems in four different areas of the cabin (front galley, back galley, passenger cabin, lavatory). Then, the user tries to recognize the different equipment and systems, while the virtual instructor provides feedback.

**Procedure try-out with virtual instructor:** the virtual instructor guides the user through five different procedures involving the equipment and systems of the cabin interior (preparing coffee, meal heating, water system, overwing exit, lavatory leak).

**Procedure practice:** the user tries to perform the correct procedure without step-by-step guidance from the virtual instructor. If the user makes errors, the application provides feedback about the error and the correct action to perform.





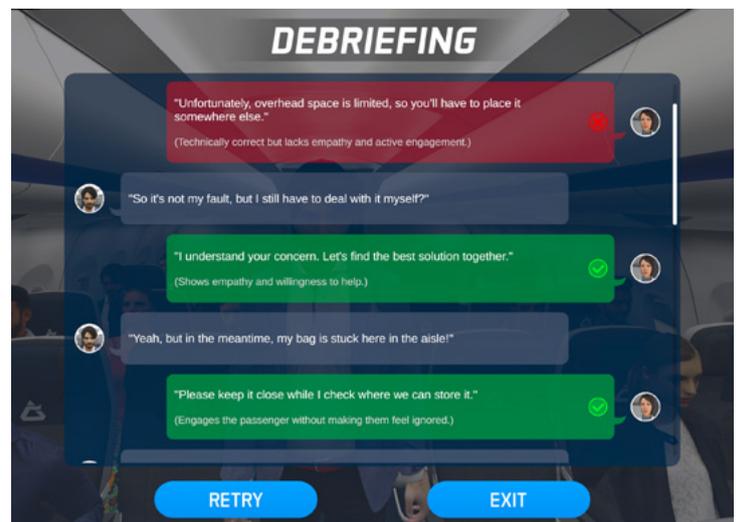
## CUSTOMER SERVICE

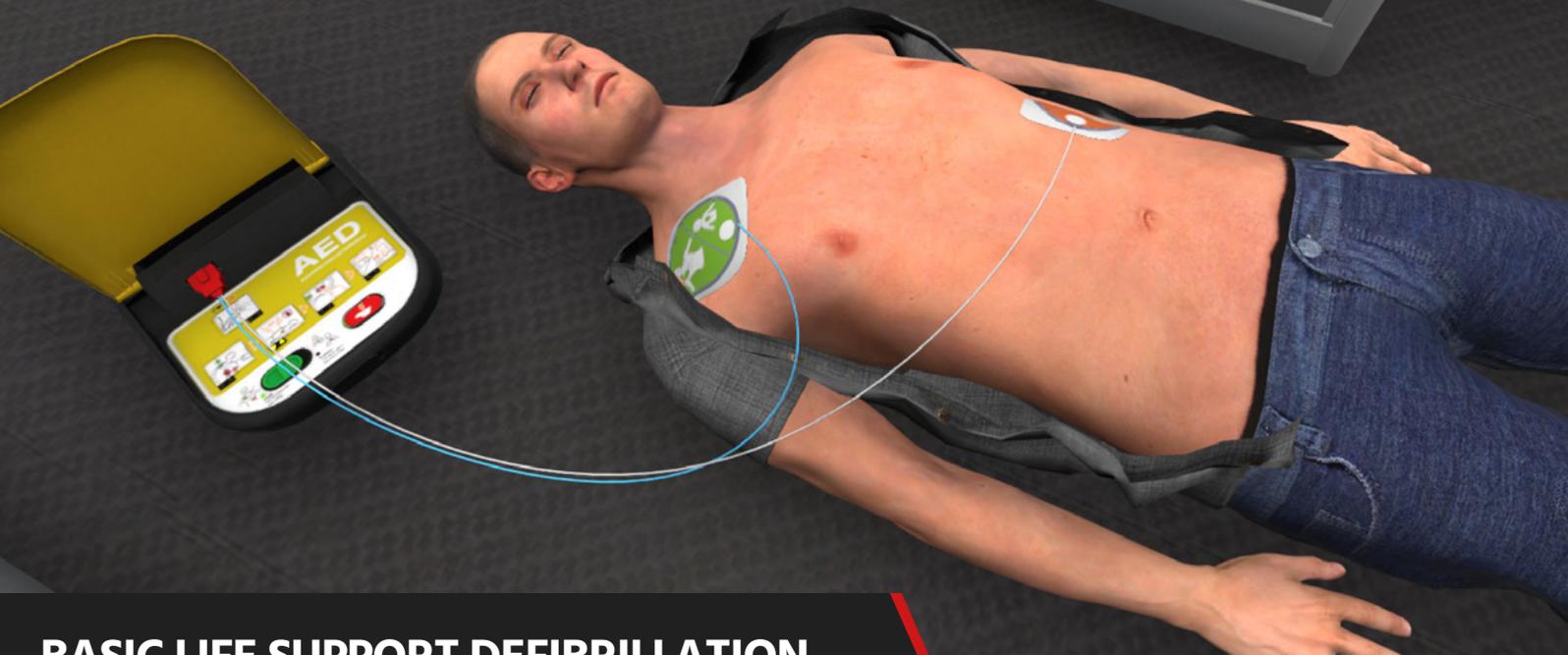
The AVIETRA Customer Service application provides an interactive experience to enhance cabin crew communication and problem-solving skills in interacting with passengers.

Through a multi-branch dialogue system, users engage in scenarios that simulate a wide range of passenger interactions, including handling service requests, addressing unruly passengers, and managing inflight sales, while maintaining professionalism and efficiency.

Each scenario features multiple decision points where users choose among response options at each stage of the interaction. Only one option is optimal for demonstrating professionalism, empathy, and problem resolution, while others may lead to passenger dissatisfaction or escalation, shaping the scenario's progression and outcome.

At the end of each scenario, a detailed debriefing explains the impact of each choice, reinforcing best practices, improving decision-making skills, and ensuring compliance to airline service standards.





## BASIC LIFE SUPPORT DEFIBRILLATION

The AVIETRA Basic Life Support Defibrillation application provides an interactive virtual experience of adult basic life support and use of an automated external defibrillator in an aircraft cabin.

The application offers two types of learning experience:

**Procedure try-out with virtual instructor:** a virtual instructor guides the user through the procedures needed to perform basic life support and use an automated external defibrillator, based on the European Resuscitation Council Guidelines for Resuscitation.

**Procedure practice:** the user tries to perform the correct Basic Life Support Defibrillation procedure, while the virtual instructor monitors their actions. If the user makes errors while performing the procedure, the application provides feedback on the specific errors or omissions.



## Hardware

AVIETRA's cabin crew training applications are available for all major brands of VR headsets (Meta, Pico, HTC Vive, Varjo) as well as for PCs and for tablets/smartphones.

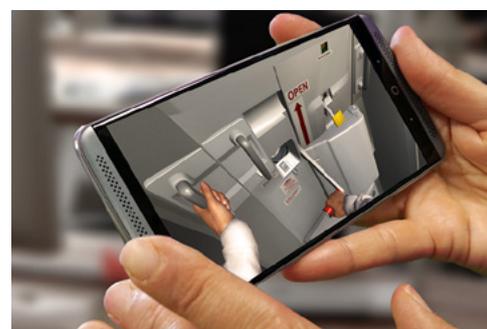
We optimize the content and user interface for each specific device to provide the best possible experience.



PC-based VR headsets



Standalone VR headsets



Tablet/smartphone

## Customizations

We can tailor our cabin crew training applications to meet any client need. Customizations can concern every aspect such as: the environment (aircraft, cabin, galleys, equipment and its location, uniforms, livery, logos, virtual characters, etc.), the checklists and procedures (specific actions to perform, sequences of actions, decision criteria, etc.), and the feedback users receive (any visual, sound, voice feedback in response to user's actions, tailored debriefing and instruction, ...).



Interface customization



Aircraft customization



Cabin customization

To learn more about AVIETRA applications and how we can help you achieve your specific VR training goals, contact us at [info@avietra.com](mailto:info@avietra.com)