



# SIMULATOR SAFETY BRIEFING

COPTERSAFETY AW139 FFS  
HELSINKI AIRPORT  
FINLAND

REV 4 – NOVEMBER 7, 2017



# SIMULATOR ACCESS

**Simulator is equipped with safety interlocks which prevent unsafe activation of the motion system**

The following conditions must be fulfilled until the motion system can be activated:

- › Access door must be closed
- › Access ramp gate must be closed
- › Access ramp must be free of obstacles (pressure sensed)

**Motion system will disengage automatically if any of these conditions are violated during training**



# SIMULATOR ACCESS

Red warning light by the drawbridge will flash when the drawbridge is in motion

- Drawbridge can also be operated manually



# COCKPIT ENTRANCE

- › Both seats must be in AFT POSITION before crew can enter into the cockpit
- › Cockpit has to be entered across the pedestal
- › Installed hand rails can be used to ease the access
- › Do not lean or step on the pedestal
- › Always use pedestal cover when entering and exiting the cockpit
- › Do not remove seat belts until pedestal cover is in place
  - Seat buckle can damage the pedestal

**For safety reasons seat belts must be worn by all occupants whenever motion system is active**



Co-Pilot seat aft position



Pilot seat aft position

# COCKPIT SEAT ADJUSTMENT

- › Cockpit seat adjustment has been modified in May 2016
- › New installation is based on real a/c rails
  - Co-pilot's electric height adjustment has been removed
- › Position and height are adjusted as in the real a/c
  - Use right hand lever (1) for position adjustment
  - Use left hand lever (2) for height adjustment
- › Place seat buckle on the seat when finished
  - This prevents potential jamming when the next customer moves the seat



Co-Pilot

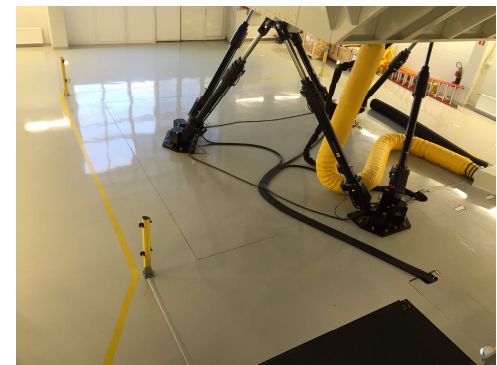


Pilot

# MOTION SYSTEM

- › Red warning light between motion actuators will illuminate when the motion system is active
- › Danger area has been marked by a yellow line
- › Danger area is also protected by a laser fence
  - Motion system emergency shutdown will occur automatically if somebody enters in the danger area

**Access to floor level is strictly prohibited**



# EMERGENCY SHUTDOWN SWITCHES

## Emergency motion & C/L OFF

- › Disengages motion and control loading systems
- › Motion system emergency shutdown will activate (gravity)
- › Drawbridge will lower automatically
- › Locations:
  - AFT pedestal
  - IOS station



# EMERGENCY SHUTDOWN SWITCHES

## Emergency power OFF

- › Complete power shutdown including the computer system
- › Emergency lighting will activate
- › Motion system emergency shutdown will activate (gravity)
- › Drawbridge will lower automatically

Location:

- IOS station








# MAINTENANCE CALL

Simulator maintenance can be called by using either

- Maintenance call pushbutton behind the IOS station
- Maintenance phone on the RH side of the IOS



- In order to call simulator maintenance
-  Select A
  -  Select call pushbutton
- Alternatively
- Dial 050 393 4732
-  Select call pushbutton



# FLASHLIGHTS

## Cockpit flashlights

Location:

- Between windshield and cockpit access door, L/R

## Non simulated area flashlights

Location:

- Instructor seat RHS
- Observer seat RHS

## Emergency flashlight

Location:

- Left of simulator drawbridge



# FIRE EXTINGUISHER AND FIRST AID KIT

## Fire extinguisher

› CO2 operated

Locations:

- Next to IOS station
- Simulator mezzanine

## First aid kit

› Contains also relief for simulator sickness

Location:

- Simulator hallway

## Motion sickness bags

Location:

- Cockpit L/R side consoles



# SMOKE AND FIRE DETECTION

- › There are two independent fire and smoke detection systems
  - Internal (simulator)
  - External (facility)
  
- › Simulator's internal fire and smoke detection system only detects incidents in the simulator complex (simulator and computer room)
  
- › Facility's external fire and smoke detection system monitors events in the facility (simulator halls, offices, hallways etc.)

# INTERNAL FIRE AND SMOKE DETECTION

- › Smoke detector (1) is located above IOS station in non-simulated area
- › Detects the smoke inside the simulator

If the smoke is detected:

- All power will be disconnected from the simulator
- Emergency lighting (2) on the RH side will activate
- Motion system will disengage in emergency mode (gravity)

**Crew must evacuate the simulator immediately**

## NOTE

There are no aural or visual warnings  
There is no automated fire suppression system.

Smoke detector will deactivate if smoke generator is used during training. Re-activates automatically once smoke has cleared.



# EXTERNAL FIRE AND SMOKE DETECTION

- › External fire and smoke detection is connected to the facility automation system
- › Simulator hall is equipped with a combined smoke and heat detector
  - › If smoke generator is used in the training the system will revert automatically to heat detection only
- › If the smoke or fire is detected in the facility
  - › Automatic fire alarm is sent to the local fire station
  - › Red warning light behind the IOS station will flash
  - › Aural fire alarm shall activate in the facility
  - › ***Crew need to evacuate the simulator immediately***

## NOTE

- Facility aural fire alarm may not always be audible in the simulator
- Facility fire alarm is not connected to the I/O of the simulator. Therefore, it does not disengage the motion system automatically.



# MANUAL FIRE ALARM

- › Facility fire alarm can also be activated manually
- › Location: **Simulator hallway**



# IN CASE OF EMERGENCY

- › Evacuation must be directed and controlled by the instructor
- › If no immediate danger exists the instructor should contact simulator maintenance
- › In case of immediate danger the instructor shall coordinate the evacuation of the simulator and will advise the crew when to leave their seats and the simulator
- › In case of fire or other danger requiring evacuation of the building the students will follow the instructions from their instructor or CS personnel if available
- › Emergency Exit Maps can be found in the facility and in the simulator.
- › Study these maps carefully and familiarize yourself with the nearest emergency exits
- › In case of building evacuation everyone should gather at the meeting point located in the sand field (parking lot) on the right hand side of the facility



# EMERGENCY ESCAPE DOOR

- › If the simulator access door is jammed the emergency escape door must be used
- › Emergency escape door has been marked with black-yellow tape and red placard
- › Kick the door open and exit the simulator

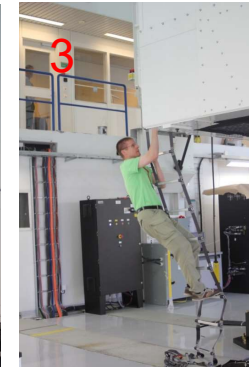
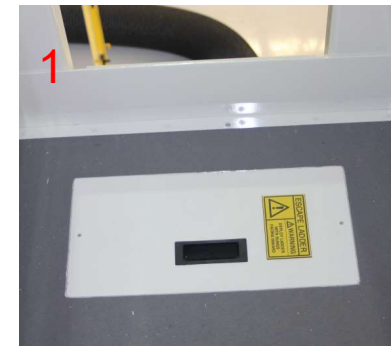


# ESCAPE LADDERS

› If the drawbridge does not lower escape ladders must be used

Location:

- LH side when exiting the simulator
- › Follow the next steps:
- Remove ladder compartment door (1)
  - Place the ladders over the safety rail (2)
  - Exit the simulator – climb sideways (3)

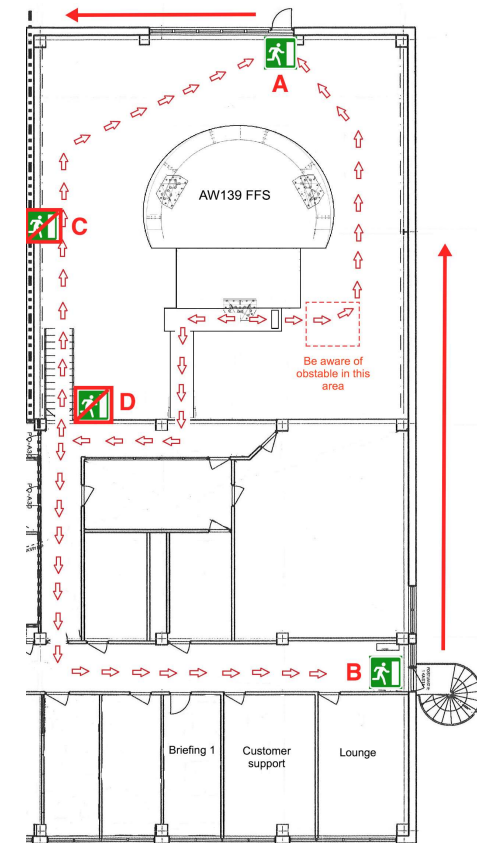
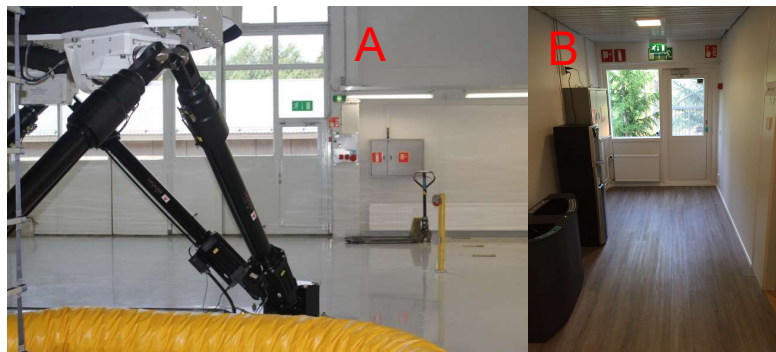


# BUILDING EVACUATION

- › Evacuation routes have been shown in the image
- › Be aware of the obstacle (a/c hose) when evacuating using escape ladders
- › Directions to the meeting point have been marked in the image

**Note:**

Do not use emergency exits C or D if exits A or B are accessible.  
Exits C and D do not provide direct access outside.



# BUILDING EVACUATION

Facility meeting point has been shown below



**ANY QUESTIONS**





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