

## ARVETI4.0 –

Project partner:



IES POLITECNICO de VIGO

**LTTA2: Example of using VR-glasses in education:**

**Learning to communicate with an aircraft via hand signals**

**TASK: Learn to communicate with an aircraft via hand signals and the correct signals during a deviation of normal operations.**

Materials: Oculus Quest 2-glasses, laptop with Steam installed, cables, screen, instruction sheet, Aircraft Ground Handling Simulator (Steam)

Instructions:

**I. Familiarize your self with the Aircraft Marshalling hand signals using the instruction sheet**

**II. Starting up the simulation**

Step 1	Log in to your computer and open the Quest-, Steam- and SteamVR-apps.
Step 2	Log in to your Oculus Quest 2 and select Link (Cable) and secure the glasses to your head and controller straps around your wrists.
Step 3	Select Aircraft Ground Handling Simulator from the main menu.
Step 4	Select Aircraft Marshalling from the AGH Simulator menu and select Random Events.



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### III. Learning Aircraft Marshalling

#### Normal Procedure

Step 1	Raise your both hands straight up for the aircraft to identify the gate
Step 2	When the aircraft nose is facing you, extend your arms straight on both sides to form a "T". Start bending and extending your arms from your elbow in a repeated cycle to signal the aircraft to keep taxiing straight forward.
Step 3	If the aircraft is drifting away from the line, keep repeating the Step 2 with your other arm and use the other arm to point straight to the side you want the aircraft to turn.
Step 4	When the aircraft is close to the stop line highlighted in the simulator, keep repeating Step 2, but lower the angle of your arms and body from 90 degrees to 45 degrees. This signals the aircraft to keep going straight with a lower speed.
Step 5	Stop the aircraft to the highlighted line by raising both of your hands up over your head and crossing the Marshalling Wands to form "X".
Step 6	<b>You have now completed the simulation.</b> The Simulator will give you feedback about the precision of your Marshalling.
Step X	IF there is a fire in the engines, do an infinity sign with your other hand and point to the source of fire.
Step XX	IF the aircrafts path is obstructed by a vehicle or equipment, signal the aircraft to do an immediate stop by crossing the Marshalling Wands described in Step 5.
Step XXX	IF one of the wingwalkers signals a problem by crossing the Marshalling Wands, signal the aircraft to do an immediate stop by crossing the Marshalling Wands described in Step 5.

**Congratulations! You have now successfully completed this Task.**

