



Trouble in the International Space Station



Scenario Description and Roadmap



Context of the story

The ISS is a collaborative project between several national space agencies: ESA (Europe), NASA (US), CSA (Canada), JAXA (Japan) and Roscosmos (Russia). This station was created to be a laboratory for scientific research in space.

The station is composed of multiple modules joined together. This is how the ISS has grown over the decades.





Global explanation

The ISS crews rotate regularly. The players are part of the next crew on their way to the station. The docking process goes well but there is no contact with the crew within the station when the door has to be opened... What happened?

The players are astronauts whose expedition has just docked with the ISS. The crew members can have different profiles: they join the ISS for specific missions ranging from maintenance, to performing scientific or social experiments. The players will not have a defined role as the scenario is detached from it. However, you can include a preliminary phase before the game in order to discuss with your students who the astronauts are, what their profiles are, what their missions are, etc.

The scenario is broken down into 3 phases:

The first phase, which is quite short, will allow the players to take control of the system. The players have arrived in their module and must wait for the astronauts inside the station to activate their door. This takes time and the players realise that something is wrong, so they will look for a way to bypass the procedure and enter the station.

The second phase takes place when the players have arrived inside the ISS. There is no reception committee except for a long dark corridor: there seems to be a problem with the electricity. They will also notice that the oxygen seems to be running out in the station: time is running out!





A map of the station shows that the different modules are darkened. Their task in this second phase is to get the power back on in different areas of the space station so they can investigate the cause of the oxygen depletion.

Players will discover that electrical components in the power panel have been damaged... so they will have to replace them in order to turn the light back on in every part of the station.

Finally, the third phase is dedicated to solving the station's problem. They will find clues in different areas of the station that will lead them to understand what has happened and to implement a solution that will isolate the problem.

At several points in this scenario, players may make some bad decisions: they must be careful as oxygen is becoming increasingly scarce and moving around in microgravity is not as easy as it seems. To symbolise this, a malus is applied when players make mistakes.



Roadmap

The **diagram** of the detailed steps is available as an **annexed file** (Annex-00).

Following the steps on the diagram while reading may help you understand and **visualize** how the game will unfold.

The scenario begins with the players, the new ISS crew, having just completed the docking of their module to the station. With no response from either the station or the coordination from Earth, they will first have to get into the station.

There they will find that there is a lack of oxygen and electricity. They will have to repair the station's power supply in order to turn on the electricity in the station.

Finally, they will be able to investigate and isolate the source of the oxygen loss.

Tutorial: open the access door

Access to the door controller

In the image of the access (00), players will be able to identify two items with numbers:

- The tool kit (05)
- The door controller (01)

Players will need to draw the corresponding cards from the Card Deck.

By combining the numbers of the toolkit (05) and the door controller (01), the players will have to search for the result card (06) to access the door control system.



An announcement informs the players of a lack of oxygen in the station and requires them to stay in the suit.

Find the instructions

Another item is hidden in the module (card 00), a small notebook (D). By drawing the corresponding card (D), they will have access to the instruction allowing them to force the SAS to open: connect the black cables on the left with the blue on the right.

Override the controller

By choosing the numbers corresponding to the black wire on the left and the blue wire on the right, they will gain access to the interior of the ISS.

Phase 2 Put the electricity back

Notice the electricity problem

The card drawn shows a dark corridor. In the part illuminated by the module the players arrived in, they can see an electrical panel guiding them to a riddle.

The players will have to solve the electrical panel riddle to re-power the different parts of the station.



| Put the power back

It seems that the incident that depleted the oxygen also created a short circuit that damaged the station's electrical system. By solving the puzzle, they will reveal the different areas of the station.

| Solve the problem

| Notice the elements: Module Hades

In the image of the module, players will see one of the places where the astronauts carry out their experiments. They will be able to see the following elements:

- An astronaut appearing unconscious and floating (named Peggy Winston),
- A module door control station.

By going to the corresponding card, the players will discover the following:

- The astronaut is half unconscious and repeats incomplete sentences,
- The riddle to close the module door.

| Notice the elements: Module Poseidon

In the image of the module, the players will see the place where the astronauts play sports. They will be able to see the following elements:

- An unconscious astronaut floating (named Igor),
- A module door control station.

By going to the corresponding card, the players will discover the following:



- The astronaut seemed to be placing tape on the wall of the station for some reason,
- The riddle to close the module door.

| Notice the elements: Module Zeus

In the image of the module, the players will see one of the places where the astronauts' rooms are located. They will be able to see the following:

- The room of an astronaut named Peggy Winston, where there is a computer and a sticky note,
- A control station for the module door.

By going to the corresponding card, the players will discover the following:

- The computer is not useful and will cost the players one minute,
- The sticky note includes instructions, but a coffee stain obscures half of it,
- The riddle to close the module door.

| Solve the puzzles

With the astronaut's whispers (Hades Module) and the sticky note in the astronaut's room (Zeus Module), the players will be able to solve the riddles to isolate the module where the air leak is coming from.

If they close the Hades or the Zeus Module, the players will lose time because that is not where the leak is coming from. Once the Poseidon Module is closed, the players will have isolated the leak and their character can use the oxygen reserves to bring the station back to an optimal level.

Congratulations, the scenario is solved!





Erasmus+

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Project code: 2020-1-FR01-KA201-080646



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